


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>				
<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER JB 4G-26-7-21				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT UNDESIGNATED				
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME JOHNSON BOTTOM				
6. NAME OF OPERATOR QEP ENERGY COMPANY						7. OPERATOR PHONE 303 308-3068				
8. ADDRESS OF OPERATOR 11002 East 17500 South, Vernal, Ut, 84078						9. OPERATOR E-MAIL debbie.stanberry@qepres.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU73680			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input checked="" type="checkbox"/>				
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE		759 FNL 307 FWL		NWNW	26	7.0 S	21.0 E	S		
Top of Uppermost Producing Zone		759 FNL 307 FWL		NWNW	26	7.0 S	21.0 E	S		
At Total Depth		759 FNL 307 FWL		NWNW	26	7.0 S	21.0 E	S		
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 307			23. NUMBER OF ACRES IN DRILLING UNIT 40				
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2650			26. PROPOSED DEPTH MD: 6084 TVD: 6084				
27. ELEVATION - GROUND LEVEL 4978			28. BOND NUMBER ESB000024			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 49-251/ 49-2153				
<b>Hole, Casing, and Cement Information</b>										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.25	9.625	0 - 450	36.0	J-55 ST&C	0.0	Rockies Lite	170	1.81	13.5
Prod	8.75	7	0 - 6004	26.0	N-80 LT&C	9.5	Halliburton Light , Type Unknown	490	2.95	11.0
							50/50 Poz	190	1.24	13.5
<b>ATTACHMENTS</b>										
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Valyn Davis				TITLE Regulatory Affairs Analyst				PHONE 435 781-4369		
SIGNATURE				DATE 03/28/2012				EMAIL Valyn.Davis@qepres.com		
API NUMBER ASSIGNED 43047524680000				APPROVAL  Permit Manager						

LOCATION OF LATERAL NUMBER 1	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
Location At Kickoff Point Depth: 6084	759 FNL 307 FWL	NWNW	2 6	7.0 S	21.0 E	S
Top of Uppermost Producing Zone	759 FNL 307 FWL	NWNW	2 6	7.0 S	21.0 E	S
At Total Depth	1980 FSL 660 FWL	NWSW	2 3	7.0 S	21.0 E	S
COUNTY UINTAH	DISTANCE TO NEAREST LEASE LINE (Feet) 660					
DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2650	PROPOSED DEPTH MD: 9125 TVD: 6642					

## Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
L1	6.125	4.5	0 - 9095	11.6	HCP-110 LT&C	9.5	No Used	0	0.0	0.0

LOCATION OF LATERAL NUMBER 2	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
Location At Kickoff Point Depth: 5954	759 FNL 307 FWL	NWNW	2 6	7.0 S	21.0 E	S
Top of Uppermost Producing Zone	759 FNL 307 FWL	NWNW	2 6	7.0 S	21.0 E	S
At Total Depth	660 FSL 1320 FWL	SESW	2 6	7.0 S	21.0 E	S
COUNTY UINTAH	DISTANCE TO NEAREST LEASE LINE (Feet) 660					
DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2650	PROPOSED DEPTH MD: 10326 TVD: 6368					

## Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
L2	6.125	4.5	0 - 10296	11.6	HCP-110 LT&C	9.5	No Used	0	0.0	0.0

**QEP Energy Company**  
**JB 4G26-7-21**  
**Summarized Drilling Procedure**

1. MIRU air rig.
2. Drill 12-1/4" hole to 450' on air.
3. Run and cement 9-5/8" 36# J-55 STC.
4. RDMO air rig.
5. MIRU drilling rig.
6. NU and test rig's 3M BOPE
7. Drill 8-3/4" hole with water based mud to 6,004'
8. Log with triple combo.
9. RIH with 7" 26# N-80 LTC casing and cement.
10. Drill out of 7" casing with 6 1/8" bit.
11. Start building curve at 6,084' to land in the H4a
12. Cont drilling lateral to TD at 9,125 MD / 6,642' TVD / 88.0 deg INC / 6.67 deg AZ
13. RIH with 4-1/2" 11.6# HCP-110 LTC liner with packers and sleeves. TOL at 5,979'.
14. RIH and set RBP at 5,966'. Orient and set whipstock on RBP.
15. Mill window and build 6 1/8" curve to land in the H4a.
16. Cont drilling lateral to TD at 10,326' MD / 6,368' TVD / 92.5 deg INC / 166 deg AZ
17. RIH with 4-1/2" 11.6# HCP-110 LTC liner with packers and sleeves. TOL at 5,966', 5' outside window.
18. Set RBP at +/- 4,000'.
19. RDMO drilling rig.
20. Release location to completions.

## QEP ENERGY COMPANY

JB 4G26-7-21

SHL: 759' FNL &amp; 307' FWL Section 26 T7S R21E

BHL 1: 1,980' FSL &amp; 660' FWL Section 23 T7S R21E

BHL 2: 660' FSL &amp; 1,320' FWL Section 23 T7S R21E

Uintah County, Utah

## DRILLING PROGRAM

## ONSHORE OIL &amp; GAS ORDER NO. 1

Approval of Operations on Onshore  
Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of its subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

**1. Formation Tops**

The estimated top of important geologic markers are as follows:

**NNE Lateral #1:**

<b>Formation</b>	<b>Depth, MD (ft)</b>	<b>Depth, TVD (ft)</b>
Uinta	Surface	Surface
Green River	3300	3300
X Marker	5520	5520
KOP	6084	6084
G1 Lime	6266	6262
H4a	6779	6559
TD	9125	6642

**SSE Lateral #2:**

<b>Formation</b>	<b>Depth, MD (ft)</b>	<b>Depth, TVD (ft)</b>
Uinta	Surface	Surface
Green River	3300	3300
X Marker	5520	5520
KOP	5954	5954
G1 Lime	6279	6262
H4a	6826	6520
TD	10326	6368

**2. Anticipated Depths of Oil, Gas, Water, and Other Mineral Bearing Zones**

The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered as follows:



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Uintah County, Utah

## NNE Lateral #1:

<u>Substance</u>	<u>Formation</u>	<u>Depth, MD</u>	<u>Depth, TVD</u>
Oil/Gas	G1 Lime	6,266'	6,262'

## SSE Lateral #2:

<u>Substance</u>	<u>Formation</u>	<u>Depth, MD</u>	<u>Depth, TVD</u>
Oil/Gas	G1 Lime	6,279'	6,262'

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If flows are detected, samples will be submitted to the BLM along with any water analyses conducted. Fresh water will be obtained from Wonsits Valley water right # 49-251 (which was filed on May 7, 1964) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. All water resulting from drilling operations will be disposed of at LaPoint Recycling and Storage in Section 12, T5S R19E of Uintah County, UT or Red Wash Disposal site; SESE, Section 28, T7S, R23E or West End Disposal Site; NESE, Section 28, T7S, R22E.

### 3. Operator's Specification for Pressure Control Equipment

- A. 3,000 psi double gate, 3,000 psi annular (schematic attached)
- B. Function test daily.
- C. All casing strings shall be pressure tested (0.22 psi/ft or 1,500 psi, whichever is greater) prior to milling the first window; test pressure shall not exceed the internal yield of the casing.
- D. Ram type preventers and associated equipment shall be tested to rated working pressure if isolated by a test plug or to 50% of the internal yield pressure of casing, whichever is less. BOP and related equipment shall meet the minimum requirements of Onshore Oil & Gas Order No. 2 for equipment and testing requirements, procedures, etc..., for a 3M system and individual components shall be operable as designed.

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Uintah County, Utah

**4. Casing Program**

Hole Size	Casing Size	Top, MD	Bottom, MD	Weight, lb/ft	Grade	Thread	Condition	MW
20"	16"	sfc	40	Steel			New	N/A
12 1/4"	9 5/8"	sfc	450	36.0	J-55	STC	New	Air
8 3/4"	7"	sfc	6004	26.0	N-80	LTC	New	9.5
6 1/8"	4 1/2"	5979	9095	11.6	HCP-110	LTC	New	9.5
6 1/8"	4 1/2"	5966	10296	11.6	HCP-110	LTC	New	9.5

Casing Strengths						
Size (in)	Weight (ppf)	Grade	CXN	Collapse (psi)	Burst (psi)	Tensile (lbs)
9 5/8"	36	J-55	STC	2020	3520	394000
7"	26	N-80	LTC	5410	7240	519000
4 1/2"	11.6	HCP-110	LTC	8830	10710	279000

\*The lateral(s) will be lined with a swell packer / frack port liner and left uncemented.

Please refer to the attached wellbore diagram and re-entry procedure for further details.

**MINIMUM DESIGN FACTORS\*:**

\*The casing listed meets or exceeds the following design factors.

COLLAPSE: 1.6

BURST: 1.6

TENSION: 1.8

Area Fracture Gradient: 0.7 psi/foot

Maximum anticipated mud weight: 9.5 ppg

Maximum surface treating pressure: 6,000 psi

**5. Auxilliary Equipment**

A. Kelly Cock – Yes

B. Float at the bit – No

C. Monitoring equipment on the mud system – visually and/or PVT or Flow Show

D. Fully opening safety valve on the rig floor – Yes

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Uintah County, Utah

E. Rotating Head – Yes

If drilling with air the following will be used:

- F. The blooie line shall be at least 6" in diameter and extend at least 100' from the well bore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500').
- H. Compressor shall be tied directly to the blooie line through a manifold.
- I. A mister with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

The surface hole will be drilled with air, air/mist, foam, or mud depending on hole conditions. Drilling below surface casing will be with water based drilling fluids consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash and polymers. No chromates will be used. It is not intended to use oil in the mud, however, in the event it is used, oil concentration will be less than 4% by volume. Maximum anticipated mud weight is 9.5 ppg.

Laterals will be drilled with an inhibitive water-based mud system consisting primarily of fresh water, bentonite, lignite, caustic, lime, soda ash, and polymers. No chromates will be used. It is not intended to use oil in the mud; however, in the event it is used the concentration will be less than 4% by volume. Maximum anticipated mud weight is 9.5 ppg.

No minimum quantity of weight material will be required to be kept on location.

PVT/Flow show will be used upon exit of surface casing to TD.

Gas detector will be used upon exit of surface casing to TD.

**6. Cementing Program**

**16" Conductor:**

Cement to surface with construction cement

**9-5/8" Surface Casing: 0' – 450' (MD)**

**Lead/Tail Slurry:** 0' – 450'. 170 sks (282 cu ft) Rockies LT cement. Slurry wt: 13.5 ppg, Slurry yield: 1.81 ft<sup>3</sup>/sk, Slurry volume: 12-1/4" hole + 100% excess.

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Uintah County, Utah

**7" Production Casing: 0' – 6,004' (MD)**

**Lead Slurry:** 0' – 5,004'. 490 sks (1444 cu ft) Halliburton Light Cement. Slurry weight: 11.0 ppg, Slurry yield: 2.95 ft<sup>3</sup>/sk, Slurry volume: 8.75" hole + 100% excess in open hole.

**Tail Slurry:** 5,004' – 6,004'. 190 sks (272 cu ft) 50/50 Poz Premium. Slurry wt: 13.5 ppg, Slurry yield: 1.24 ft<sup>3</sup>/sk, Slurry volume: 8-3/4" hole + 75% excess.

**NNE Lateral #1: 5,979' – 9,095'**

Uncemented slotted liner.

**SSE Lateral #2: 5,966' – 10,296'**

Uncemented slotted liner.

**7. Testing, Logging, and Coring Program**

- A. Cores – None Anticipated
- B. DST – None Anticipated
- C. Logging:
  - i. Mud logging from 1,000' to TD
  - ii. Triple combo from BSC to ICP deg INC
  - iii. MWD-GR will be utilized during drilling operations to aid in landing the curve and maintaining the laterals within the desired zone.
- D. Formation and completion interval: H4a, final determination of completion will be made by analysis of mud logging data. Stimulation: stimulation will be designed for the particular area of interest encountered.

**8. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards**

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S has been encountered or is known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom-hole pressure equals approximately 2,966 psi. Maximum anticipated bottom hole temperature is approximately 140°F.

QEP ENERGY COMPANY

JB 4G26-7-21

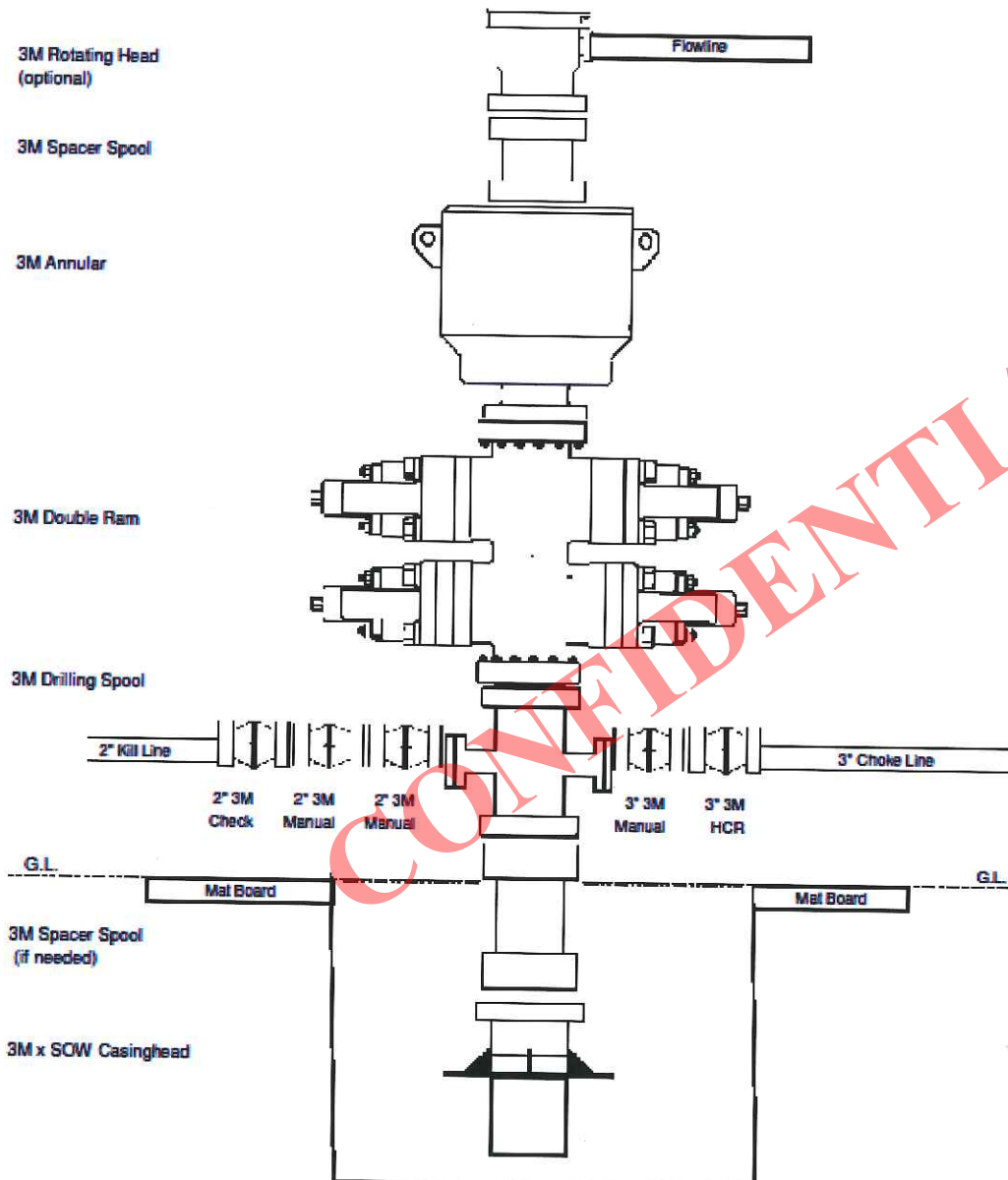
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Uintah County, Utah

**3M BOP x 3M Annular  
Minimum Requirements**



QEP ENERGY COMPANY

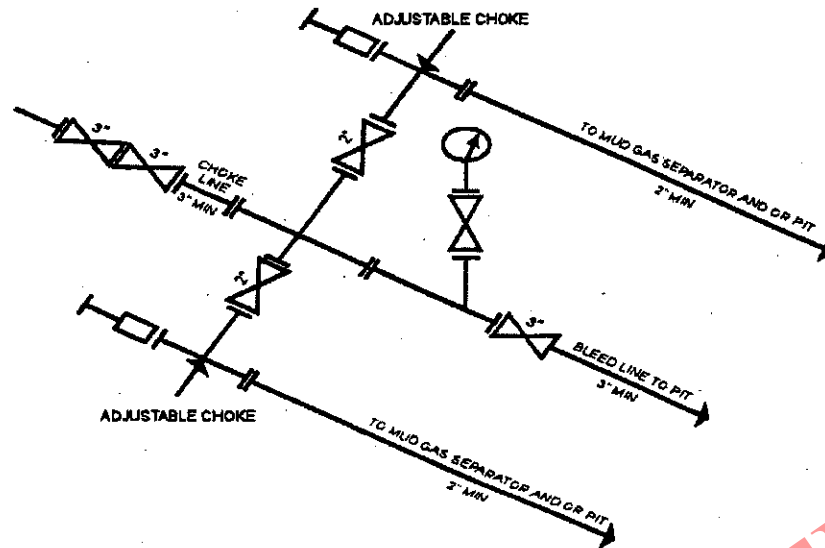
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Uintah County, Utah

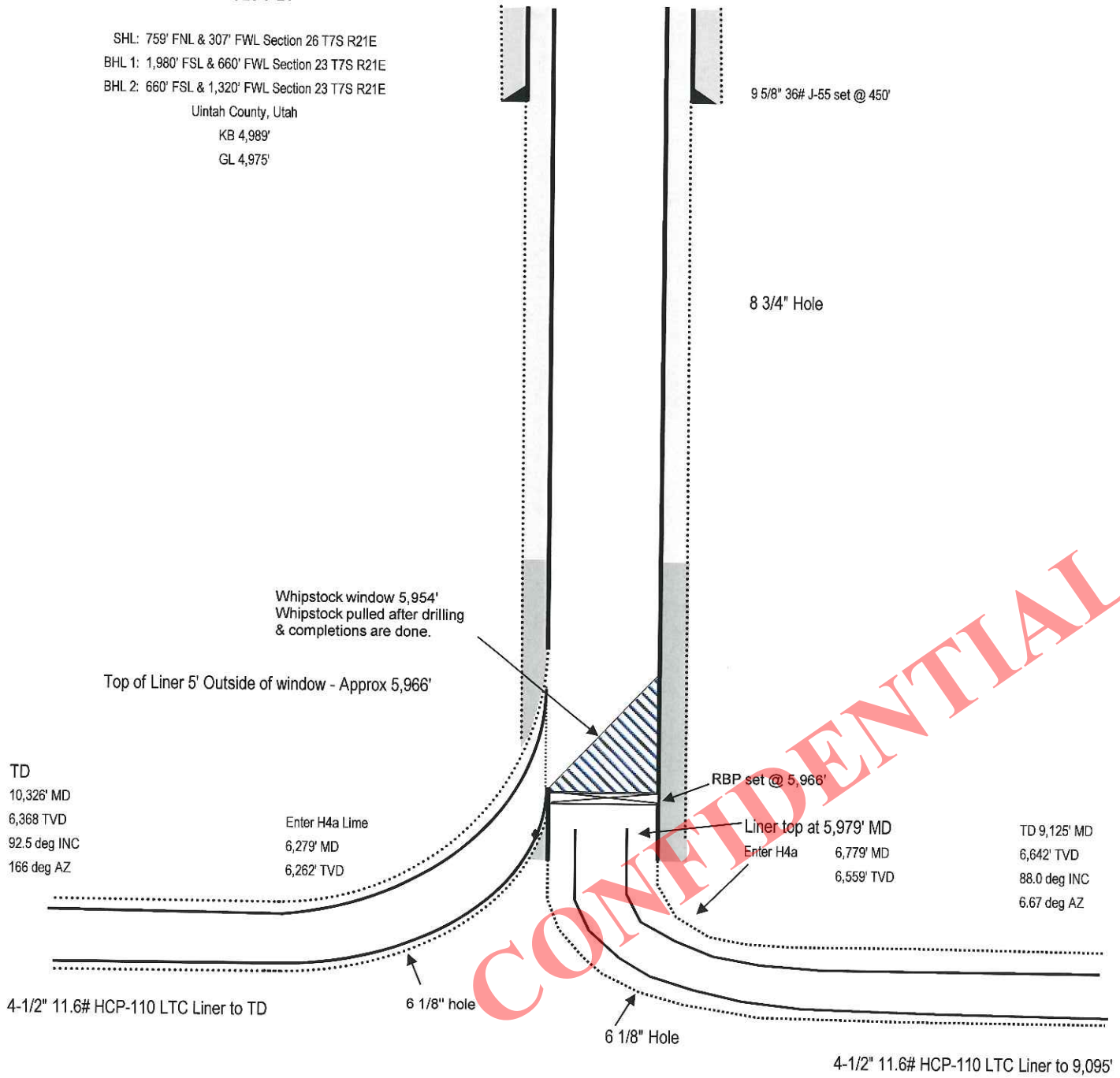


3M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY  
[54 FR 39528, Sept. 27, 1989]

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**Proposed**  
**JB 4G26-7-21**

SHL: 759' FNL & 307' FWL Section 26 T7S R21E  
 BHL 1: 1,980' FSL & 660' FWL Section 23 T7S R21E  
 BHL 2: 660' FSL & 1,320' FWL Section 23 T7S R21E  
 Uintah County, Utah  
 KB 4,989'  
 GL 4,975'



T7S, R21E, S.L.B.&M.

QEP ENERGY COMPANY

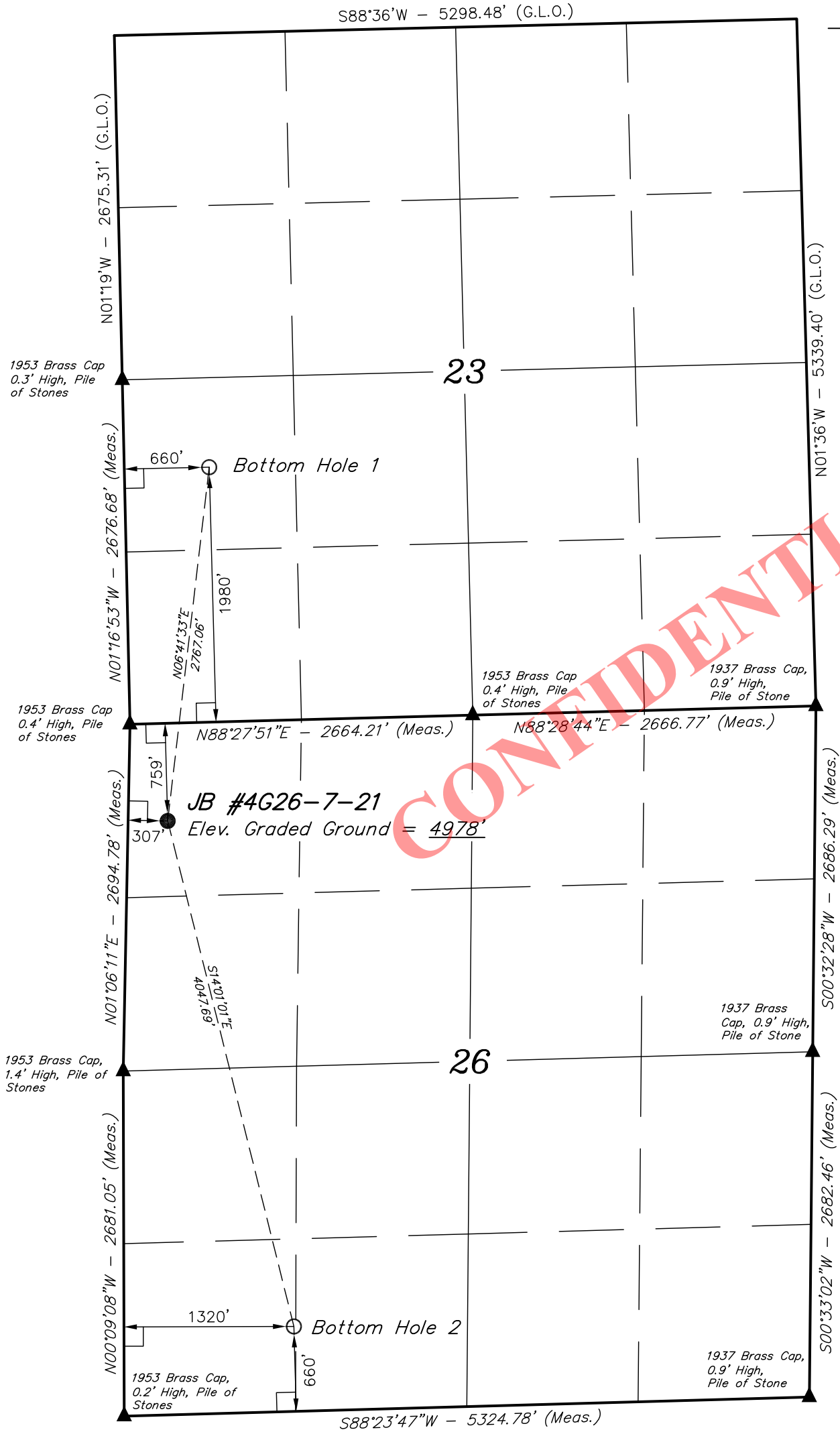
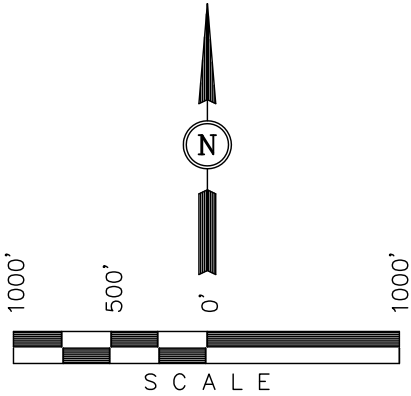
Well location, JB #4G26-7-21, located as shown in the NW 1/4 NW 1/4 of Section 26, T7S, R21E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK 20EAM LOCATED IN THE SE 1/4 OF SECTION 35, T8S, R21E, S.L.B.&M. TAKEN FROM THE OURAY SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 4697 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



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LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE 2)	NAD 83 (TARGET BOTTOM HOLE 1)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°10'35.78" (40.176606)	LATITUDE = 40°11'41.73" (40.194925)	LATITUDE = 40°11'14.57" (40.187381)
LONGITUDE = 109°31'38.25" (109.527292)	LONGITUDE = 109°31'46.76" (109.529656)	LONGITUDE = 109°31'50.90" (109.530806)
NAD 27 (TARGET BOTTOM HOLE 2)	NAD 27 (TARGET BOTTOM HOLE 1)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°10'35.91" (40.176642)	LATITUDE = 40°11'41.86" (40.194961)	LATITUDE = 40°11'14.70" (40.187417)
LONGITUDE = 109°31'35.77" (109.526603)	LONGITUDE = 109°31'44.28" (109.528967)	LONGITUDE = 109°31'48.42" (109.530117)

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 08-31-11	DATE DRAWN: 11-17-11
PARTY A.F. M.H. J.M.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QEP ENERGY COMPANY	

RECEIVED: March 28, 2012



# QEP ENERGY COMPANY

**JB #4G26-7-21**

**LOCATED IN UINTAH COUNTY, UTAH  
SECTION 26, T7S, R21E, S.L.B.&M.**

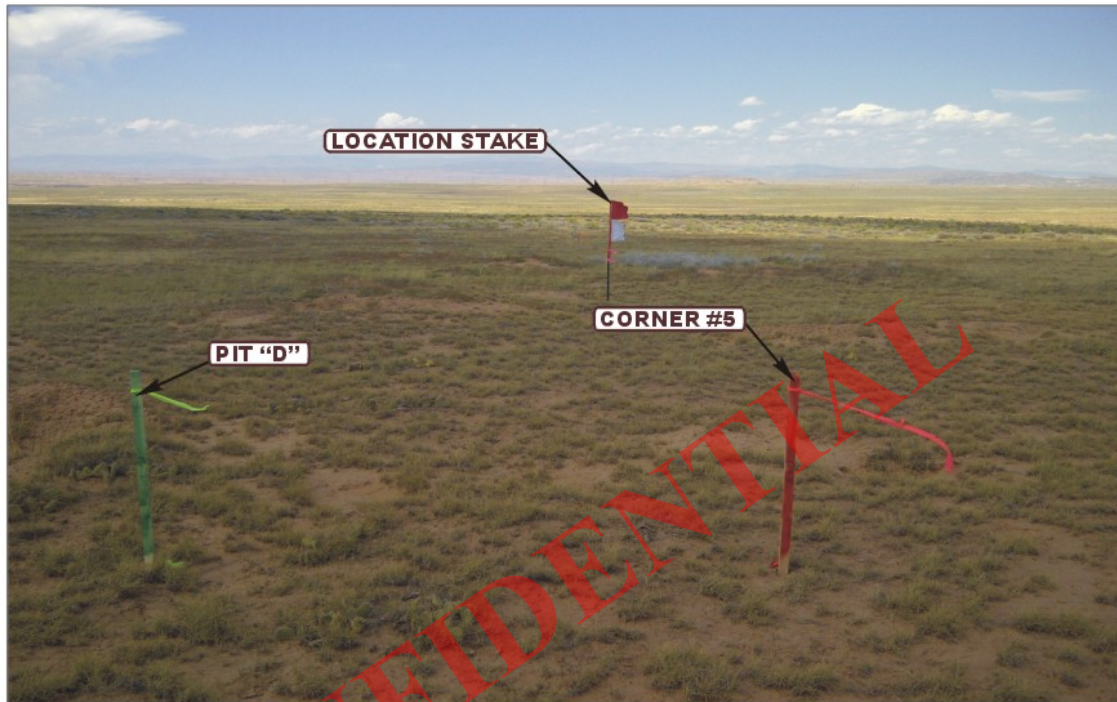


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: EASTERLY



**UELS**

Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
435-789-1017 uels@uelsinc.com

**LOCATION PHOTOS**

**09 09 11**  
MONTH DAY YEAR

**PHOTO**

TAKEN BY: A.F.

DRAWN BY: C.I.

REVISED: 00-00-00

T7S, R21E, S.L.B.&M.

QEP ENERGY COMPANY

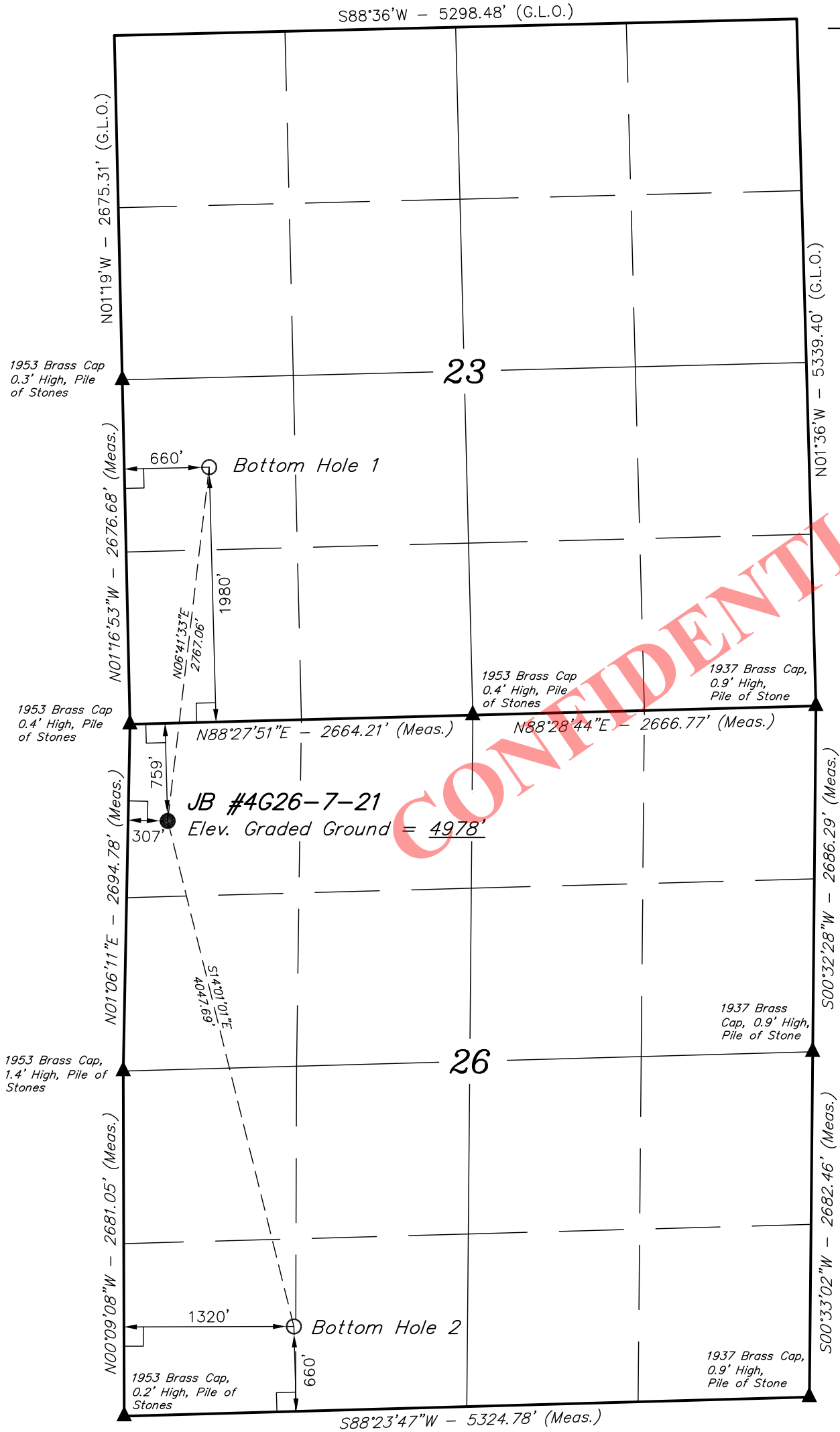
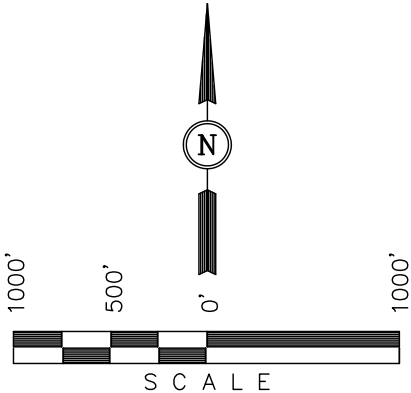
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ROBERT L. KAY  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 161319  
STATE OF UTAH

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NAD 27 (TARGET BOTTOM HOLE 2)	NAD 27 (TARGET BOTTOM HOLE 1)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°10'35.91" (40.176642)	LATITUDE = 40°11'41.86" (40.194961)	LATITUDE = 40°11'14.70" (40.187417)
LONGITUDE = 109°31'35.77" (109.526603)	LONGITUDE = 109°31'44.28" (109.528967)	LONGITUDE = 109°31'48.42" (109.530117)

UINTAH ENGINEERING & LAND SURVEYING 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 08-31-11	DATE DRAWN: 11-17-11
PARTY A.F. M.H. J.M.H.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE QEP ENERGY COMPANY	

RECEIVED: March 28, 2012

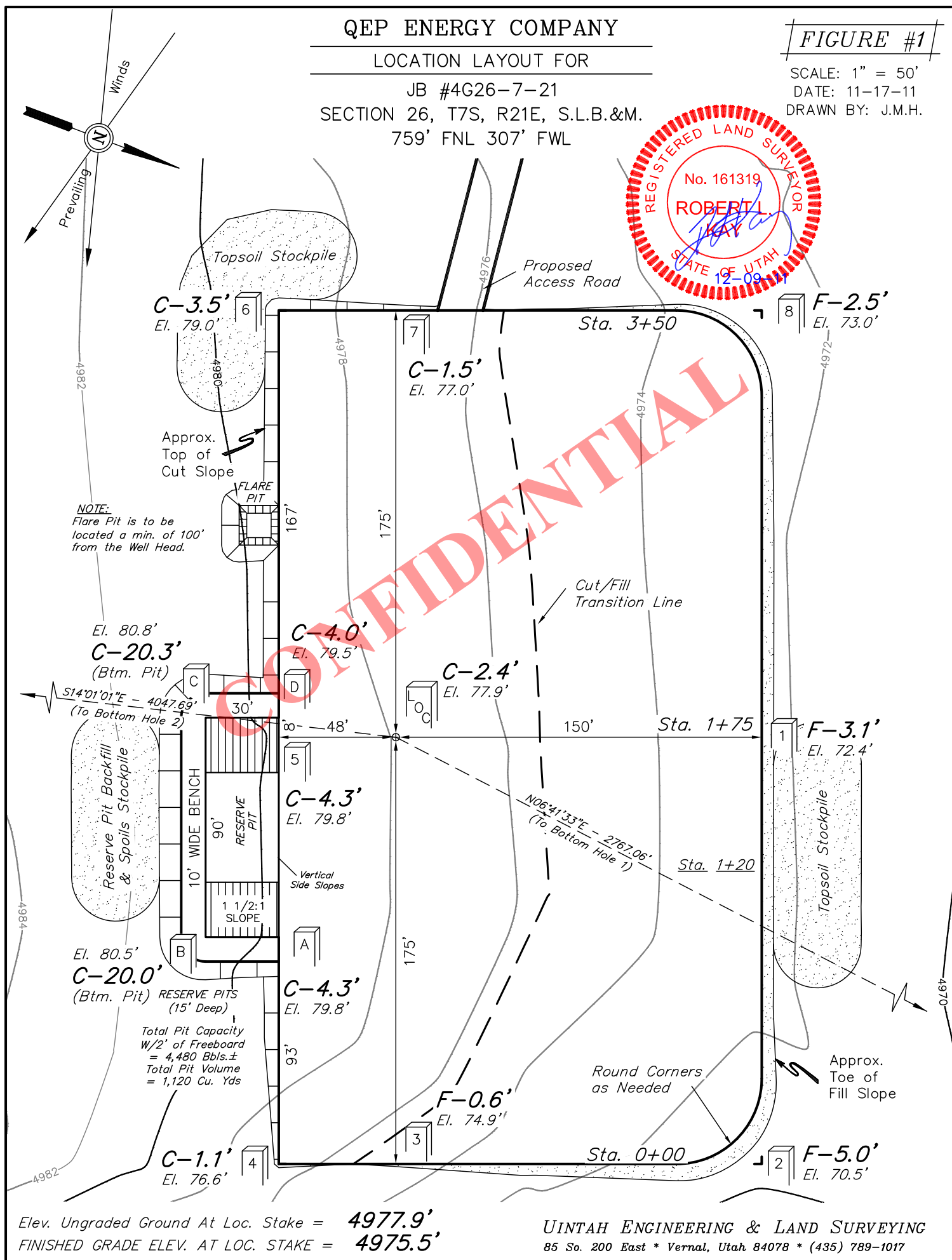
## QEP ENERGY COMPANY

## LOCATION LAYOUT FOR

JB #4G26-7-21  
SECTION 26, T7S, R21E, S.L.B.&M.  
759' FNL 307' FWL

FIGURE #1

SCALE: 1" = 50'  
DATE: 11-17-11  
DRAWN BY: J.M.H.





## QEP ENERGY COMPANY

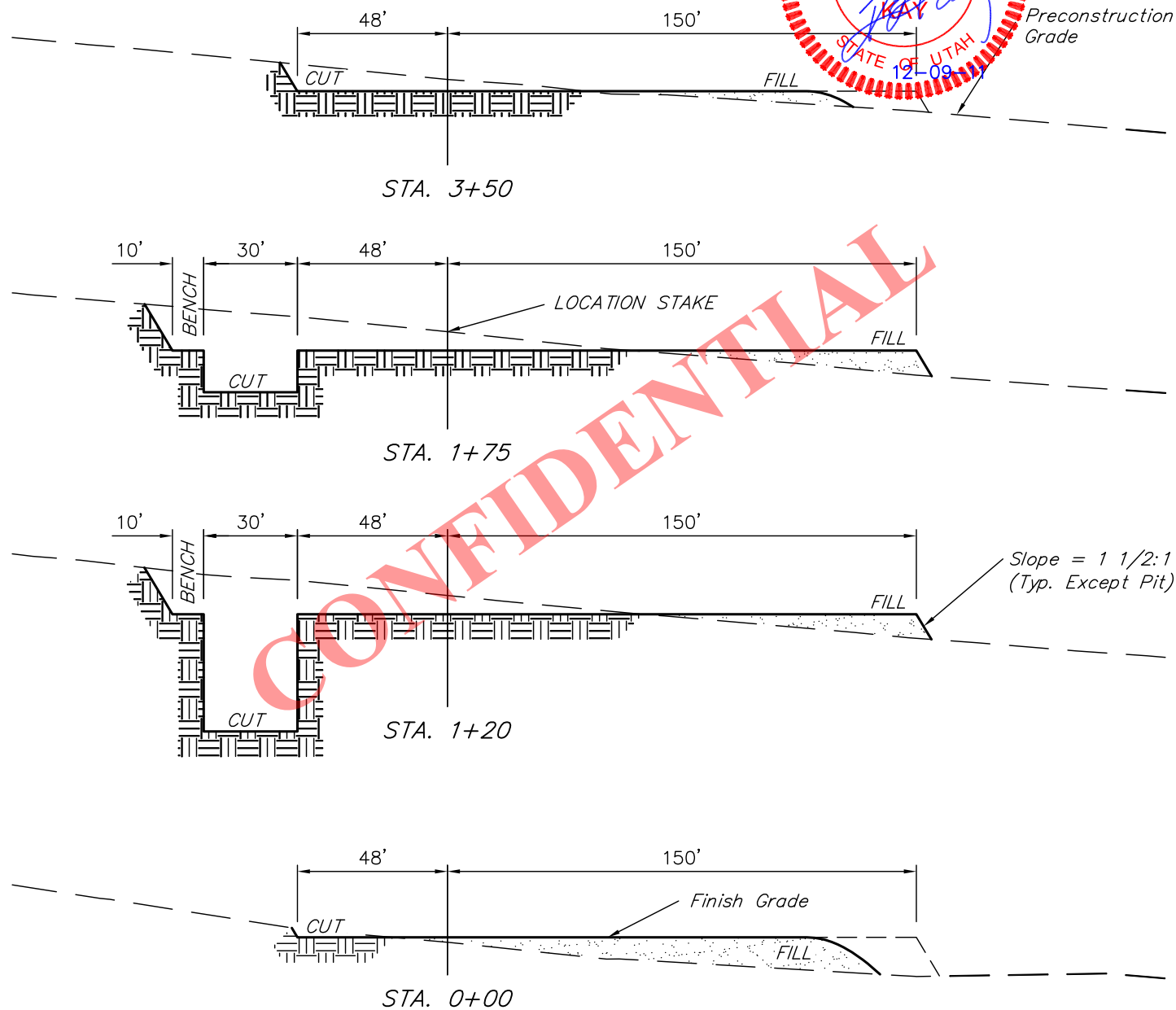
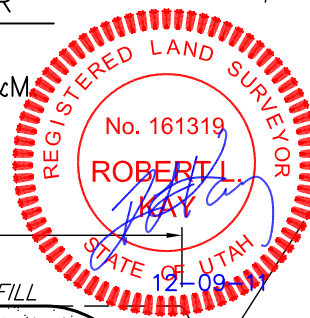
## TYPICAL CROSS SECTIONS FOR

JB #4G26-7-21

SECTION 26, T7S, R21E, S.L.B.&M  
759' FNL 307' FWL

FIGURE #2

1" = 20'  
X-Section  
Scale  
1" = 50'  
DATE: 11-17-11  
DRAWN BY: J.M.H.



## NOTE:

Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.

## APPROXIMATE ACREAGES

WELL SITE DISTURBANCE =  $\pm 2.055$  ACRES  
ACCESS ROAD DISTURBANCE =  $\pm 1.620$  ACRES  
PIPELINE DISTURBANCE =  $\pm 3.295$  ACRES  
TOTAL =  $\pm 6.970$  ACRES

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

## APPROXIMATE YARDAGES

(6") Topsoil Stripping = 1,530 Cu. Yds.  
Remaining Location = 3,820 Cu. Yds.  
TOTAL CUT = 5,350 CU.YDS.  
FILL = 3,260 CU.YDS.

EXCESS MATERIAL = 2,090 Cu. Yds.  
Topsoil & Pit Backfill = 2,090 Cu. Yds.  
(1/2 Pit Vol.)  
EXCESS UNBALANCE = 0 Cu. Yds.  
(After Interim Rehabilitation)

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85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: March 28, 2012

## QEP ENERGY COMPANY

## TYPICAL RIG LAYOUT FOR

JB #4G26-7-21

SECTION 26, T7S, R21E, S.L.B.&amp;M.

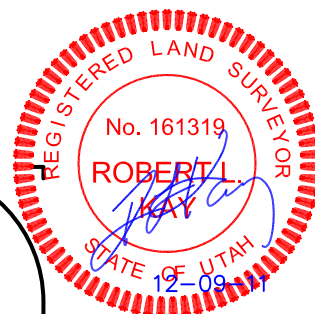
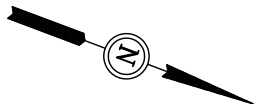
759' FNL 307' FWL

FIGURE #3

SCALE: 1" = 50'

DATE: 11-17-11

DRAWN BY: J.M.H.



NOTE:  
Flare Pit is to be  
located a min. of 100'  
from the Well Head.

FLARE  
PIT

167'

175'

PIPE RACKS

CATWALK

DOG HOUSE

RIG

150'

PUMP

MUD SHED

HOPPER

POWER

TOOLS

FUEL

TRAILER

TOILET

FUEL

STORAGE  
TANK

TRASH



10' WIDE BENCH

30'

90'

RESERVE  
PIT1 1/2:1  
SLOPEVertical  
Side Slopes

93'

RESERVE PITS  
(15' Deep)

Total Pit Capacity  
W/2' of Freeboard  
= 4,480 Bbls.±  
Total Pit Volume  
= 1,120 Cu. Yds

UINTAH ENGINEERING &amp; LAND SURVEYING

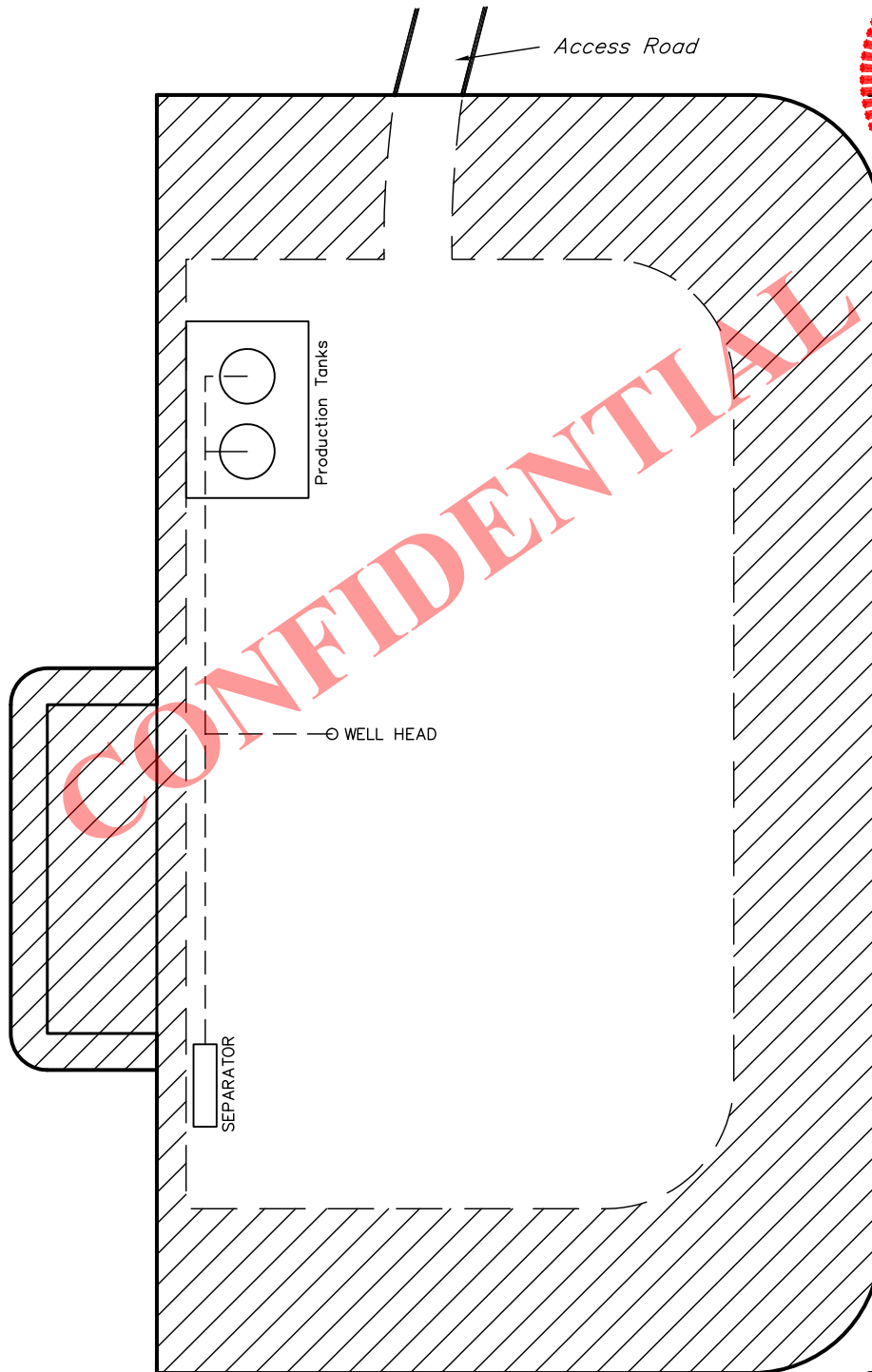
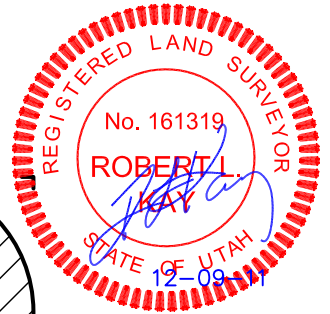
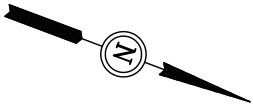
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

RECEIVED: March 28, 2012

**QEP ENERGY COMPANY**  
**PRODUCTION FACILITY LAYOUT FOR**  
JB #4G26-7-21  
SECTION 26, T7S, R21E, S.L.B.&M.  
759' FNL 307' FWL

**FIGURE #4**

SCALE: 1" = 50'  
DATE: 11-17-11  
DRAWN BY: J.M.H.



APPROXIMATE ACREAGES  
UN-RECLAIMED =  $\pm 0.902$  ACRES



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85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

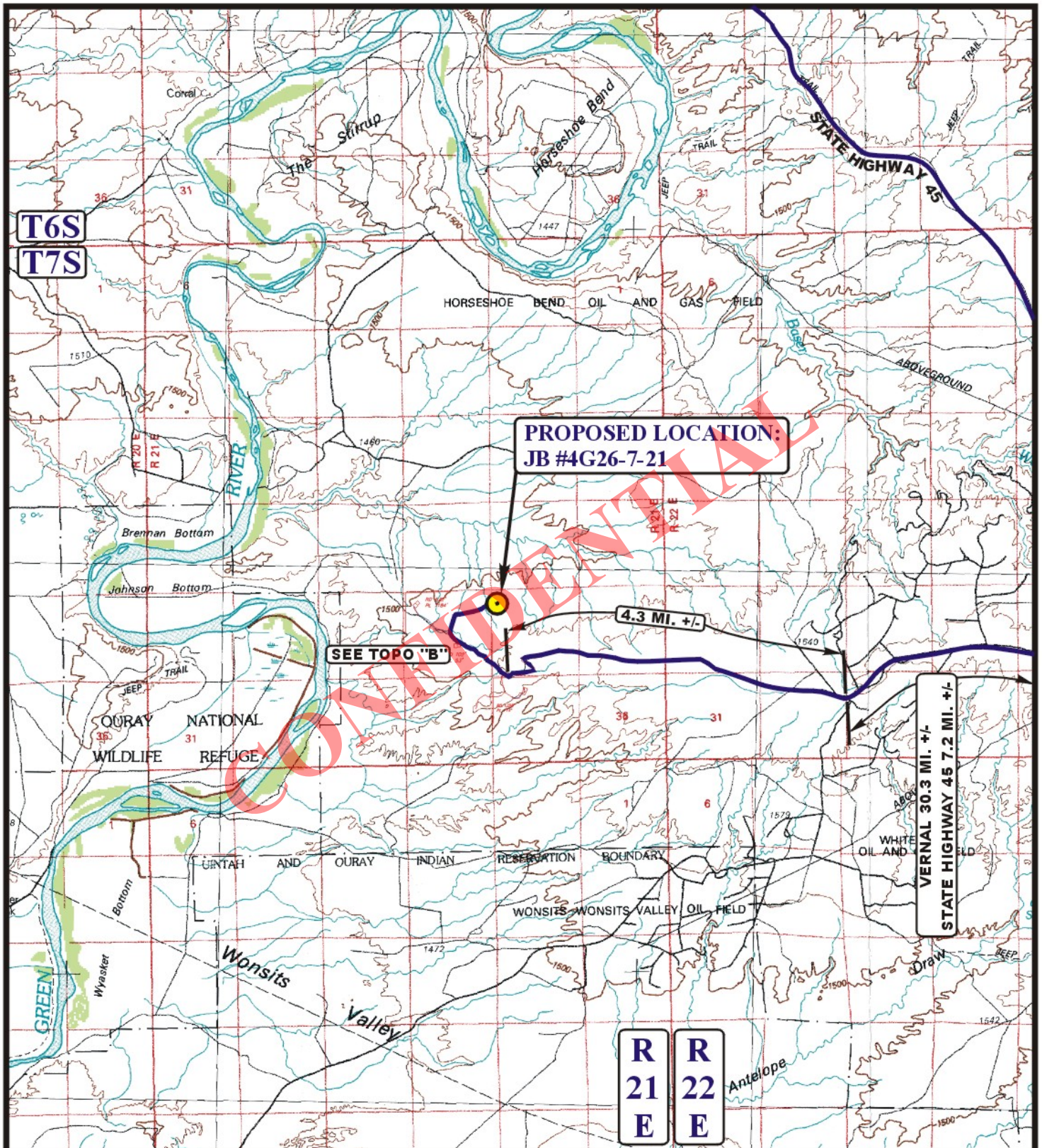
**RECEIVED:** March 28, 2012

**QEP ENERGY COMPANY**  
**JB #4G26-7-21**  
**SECTION 26, T7S, R21E, S.L.B.&M.**

PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.9 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 19.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 7.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 4.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN RIGHT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE PROPOSED ACCESS TO THE EAST; FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 2,352' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 36.1 MILES.





**LEGEND:**

PROPOSED LOCATION

**QEP ENERGY COMPANY**

**JB #4G26-7-21**  
**SECTION 26, T7S, R21E, S.L.B.&M.**  
**759' FNL 307' FWL**



**Uintah Engineering & Land Surveying**  
**85 South 200 East Vernal, Utah 84078**  
**(435) 789-1017 \* FAX (435) 789-1813**

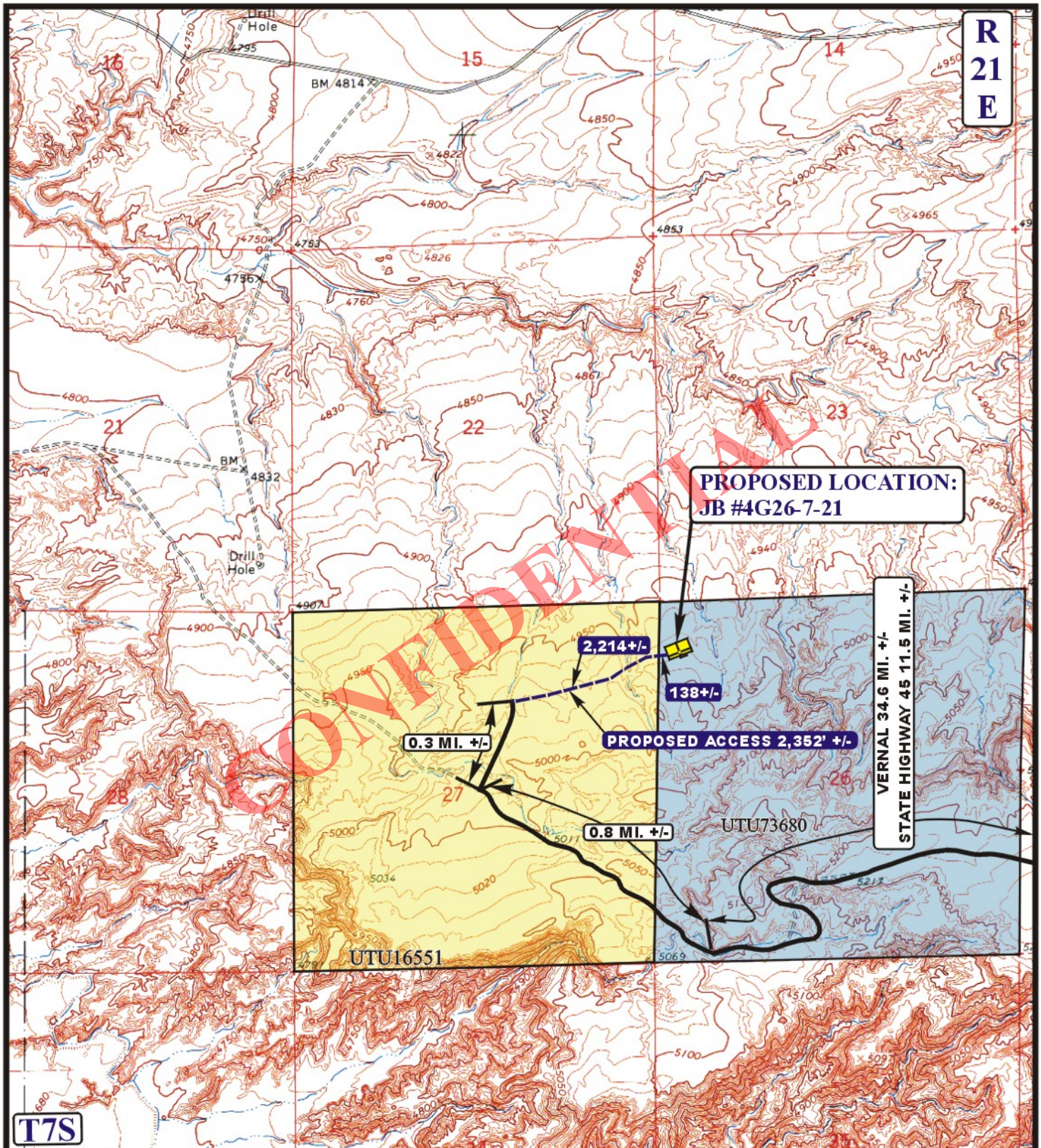
**ACCESS ROAD**  
**M A P**

**09 09 11**  
**MONTH DAY YEAR**

**SCALE: 1:100,000** **DRAWN BY: C.I.** **REVISED: 00-00-00**





**LEGEND:**

———— EXISTING ROAD  
 - - - - - PROPOSED ACCESS ROAD

**QEP ENERGY COMPANY****JB #4G26-7-21**

**SECTION 26, T7S, R21E, S.L.B.&M.**  
**759' FNL 307' FWL**



**Uintah Engineering & Land Surveying**  
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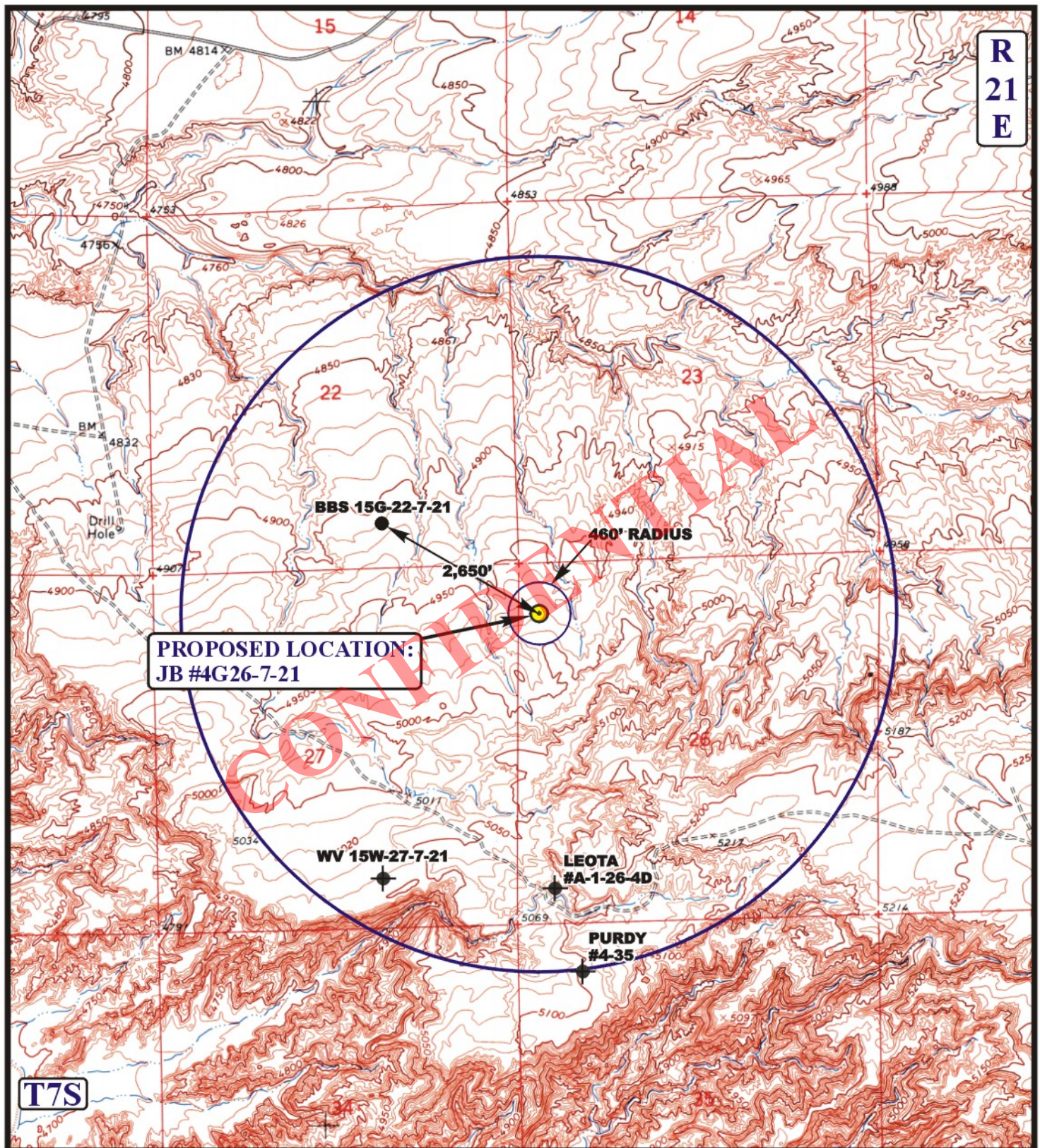
**ACCESS ROAD**  
**M A P**

**09 09 11**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.I. REVISED: 00-00-00

**B**  
**TOPO**





**LEGEND:**

- |                   |                         |
|-------------------|-------------------------|
| ⊗ DISPOSAL WELLS  | ⊗ WATER WELLS           |
| ● PRODUCING WELLS | ● ABANDONED WELLS       |
| ⊖ SHUT IN WELLS   | ● TEMPORARILY ABANDONED |



**QEP ENERGY COMPANY**

**JB #4G26-7-21**  
**SECTION 26, T7S, R21E, S.L.B.&M.**  
**759' FNL 307' FWL**



**Uintah Engineering & Land Surveying**  
**85 South 200 East Vernal, Utah 84078**  
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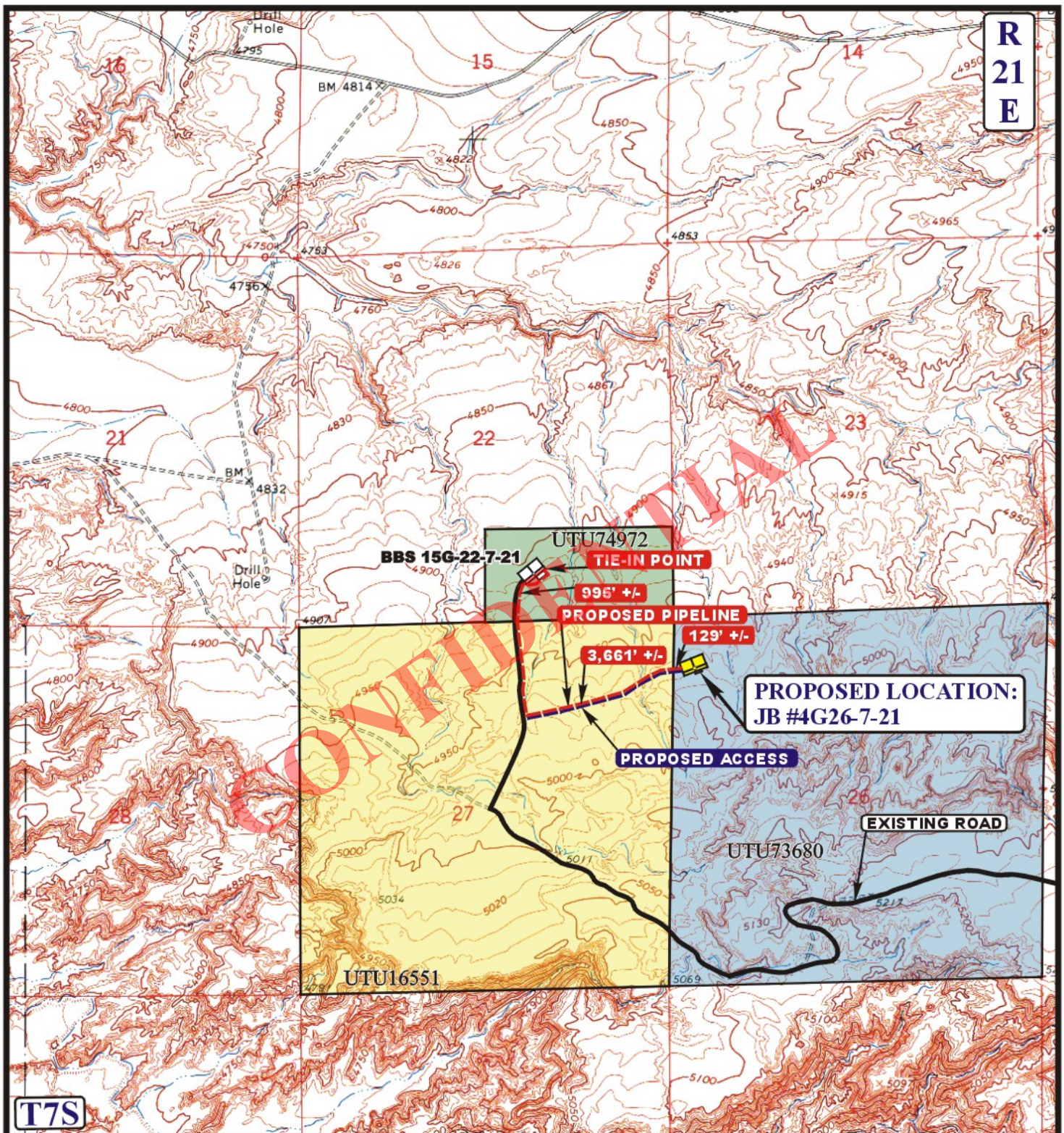
**TOPOGRAPHIC  
MAP**

**09 09 11**  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.I. REVISED: 00-00-00







**APPROXIMATE TOTAL PIPELINE DISTANCE = 4,785' +/-**

**LEGEND:**

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE

**QEP ENERGY COMPANY**

**JB #4G26-7-21**  
**SECTION 26, T7S, R21E, S.L.B.&M.**  
**759' FNL 307' FWL**



**Uintah Engineering & Land Surveying**  
**85 South 200 East Vernal, Utah 84078**  
**(435) 789-1017 \* FAX (435) 789-1813**



**TOPOGRAPHIC**  
**MAP**

**09 09 11**  
**MONTH DAY YEAR**

**SCALE: 1" = 1000'** **DRAWN BY: C.I.** **REVISED: 00-00-00**

**D**  
**TOPO**





## **QEP ENERGY (UT)**

**Johnson Bottom**

**JB 4G26-7-21**

**JB 4G26-7-21**

**Lateral #1**

**Plan: Plan ver.0**

## **Standard Planning Report**

**08 February, 2012**

**CONFIDENTIAL**





## QEP Resources, Inc.

## Planning Report



<b>Database:</b>	EDMDB_QEP	<b>Local Co-ordinate Reference:</b>	Well JB 4G26-7-21
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 4989.50usft (EST. RKB)
<b>Project:</b>	Johnson Bottom	<b>MD Reference:</b>	RKB @ 4989.50usft (EST. RKB)
<b>Site:</b>	JB 4G26-7-21	<b>North Reference:</b>	True
<b>Well:</b>	JB 4G26-7-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral #1		
<b>Design:</b>	Plan ver.0		

<b>Project</b>	Johnson Bottom, UT		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		Using geodetic scale factor

<b>Site</b>	JB 4G26-7-21		
<b>Site Position:</b>		<b>Northing:</b>	7,243,034.412 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,190,511.430 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	40.187381
		<b>Longitude:</b>	-109.530806
		<b>Grid Convergence:</b>	1.26 °

<b>Well</b>	JB 4G26-7-21		
<b>Well Position</b>	<b>+N/-S</b>	-0.01 usft	<b>Northing:</b> 7,243,034.400 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 2,190,511.430 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	4,975.50 usft
		<b>Latitude:</b>	40.187381
		<b>Longitude:</b>	-109.530806
		<b>Ground Level:</b>	4,975.50 usft

<b>Wellbore</b>	Lateral #1		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	IGRF2010	2/8/2012	11.03
			<b>Dip Angle (°)</b>
			66.00
			<b>Field Strength (nT)</b>
			52,362

<b>Design</b>	Plan ver.0		
<b>Audit Notes:</b>			
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b> 0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>
	0.00	0.00	0.00
			<b>Direction (°)</b>
			6.67

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,084.42	0.00	0.00	6,084.42	0.00	0.00	0.00	0.00	0.00	0.00	
6,817.75	88.00	6.67	6,561.59	457.69	53.50	12.00	12.00	0.00	6.67	
9,125.51	88.00	6.67	6,642.13	2,748.44	321.27	0.00	0.00	0.00	0.00	JB 4G26-7-21 Target :

<b>Planned Survey</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,084.42	0.00	0.00	6,084.42	0.00	0.00	0.00	0.00	0.00	0.00	
6,817.75	88.00	6.67	6,561.59	457.69	53.50	460.80	12.00	12.00	0.00	
9,125.51	88.00	6.67	6,642.13	2,748.44	321.27	2,767.16	0.00	0.00	0.00	



**QEP Resources, Inc.**  
Planning Report



<b>Database:</b>	EDMDB_QEP	<b>Local Co-ordinate Reference:</b>	Well JB 4G26-7-21
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 4989.50usft (EST. RKB)
<b>Project:</b>	Johnson Bottom	<b>MD Reference:</b>	RKB @ 4989.50usft (EST. RKB)
<b>Site:</b>	JB 4G26-7-21	<b>North Reference:</b>	True
<b>Well:</b>	JB 4G26-7-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral #1		
<b>Design:</b>	Plan ver.0		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
JB 4G26-7-21 Target #1	0.00	0.00	6,642.13	2,748.44	321.27	7,245,789.022	2,190,772.096	40.194925	-109.529656
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
450.00	450.00	9 5/8"	9-5/8	12-1/4	
6,004.00	6,004.00	7"	7	8-3/4	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,300.00	3,300.00	Green River fm		0.00		
5,520.00	5,520.00	X' marker		0.00		
6,266.37	6,262.00	G1 Lime		0.00		
6,779.92	6,558.77	H4a		2.00	6.67	



# Company Name: QEP ENERGY (UT)



Azimuths to True North  
 Magnetic North: 11.03°  
 Magnetic Field  
 Strength: 52361.5enT  
 Dip Angle: 66.00°  
 Date: 2/8/2012  
 Model: IGRF2010

Project: Johnson Bottom  
 Site: JB 4G26-7-21  
 Well: JB 4G26-7-21  
 Wellbore: Lateral #1  
 Design: Plan ver.0

WELL DETAILS: JB 4G26-7-21  
Lateral #1

## REFERENCE INFORMATION

PROJECT DETAILS: Johnson Bottom

Ground Level:  
 4975.50  
 +N/-S +E/-W Northing Easting Latitude Longitude Slot  
 0.00 0.00 7243034.396 2190511.431 40.187380 -109.530806

Co-ordinate (N/E) Reference: Well JB 4G26-7-21, True North  
 Vertical (TVD) Reference: RKB @ 4989.50usft (EST. RKB)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: RKB @ 4989.50usft (EST. RKB)  
 Calculation Method: Minimum Curvature

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Central Zone  
 System Datum: Mean Sea Level

## SECTION DETAILS

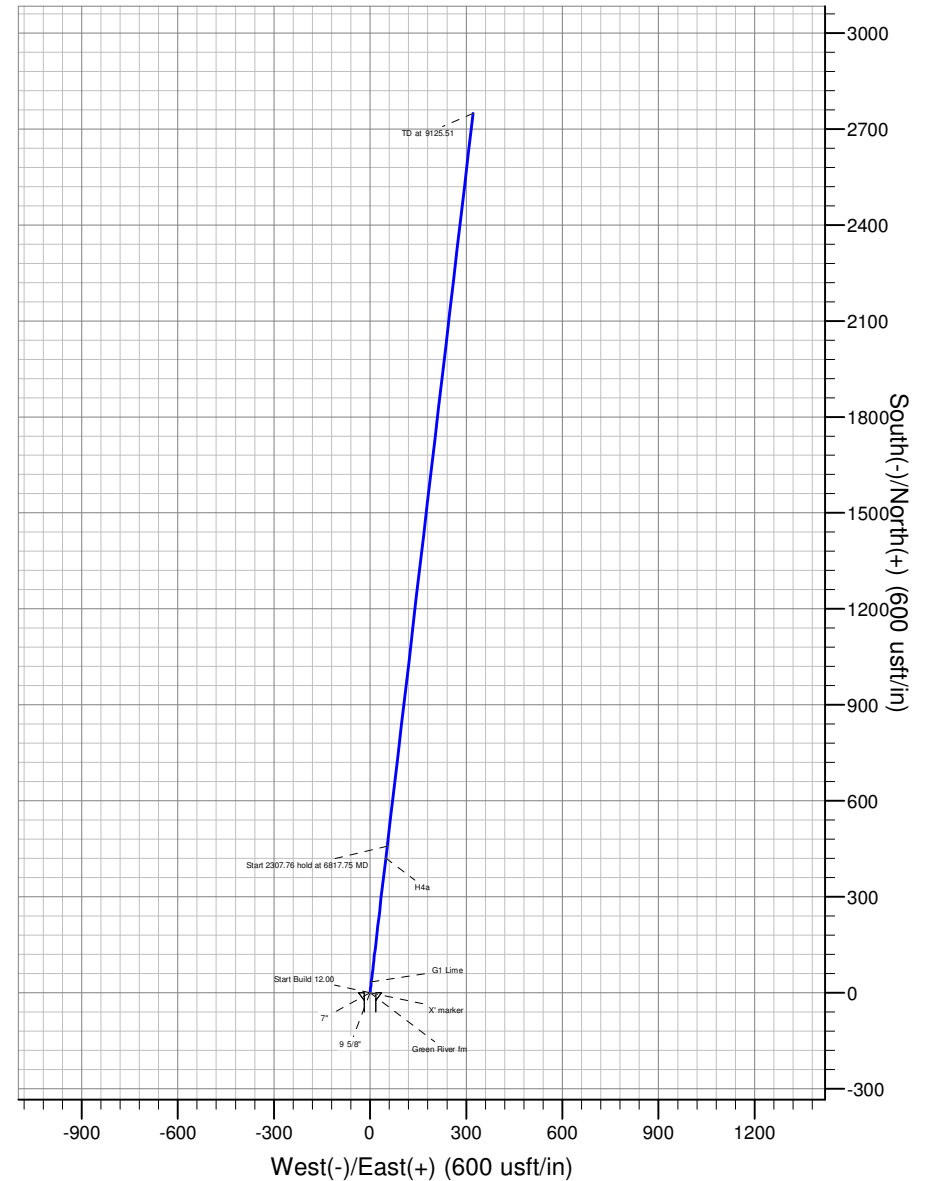
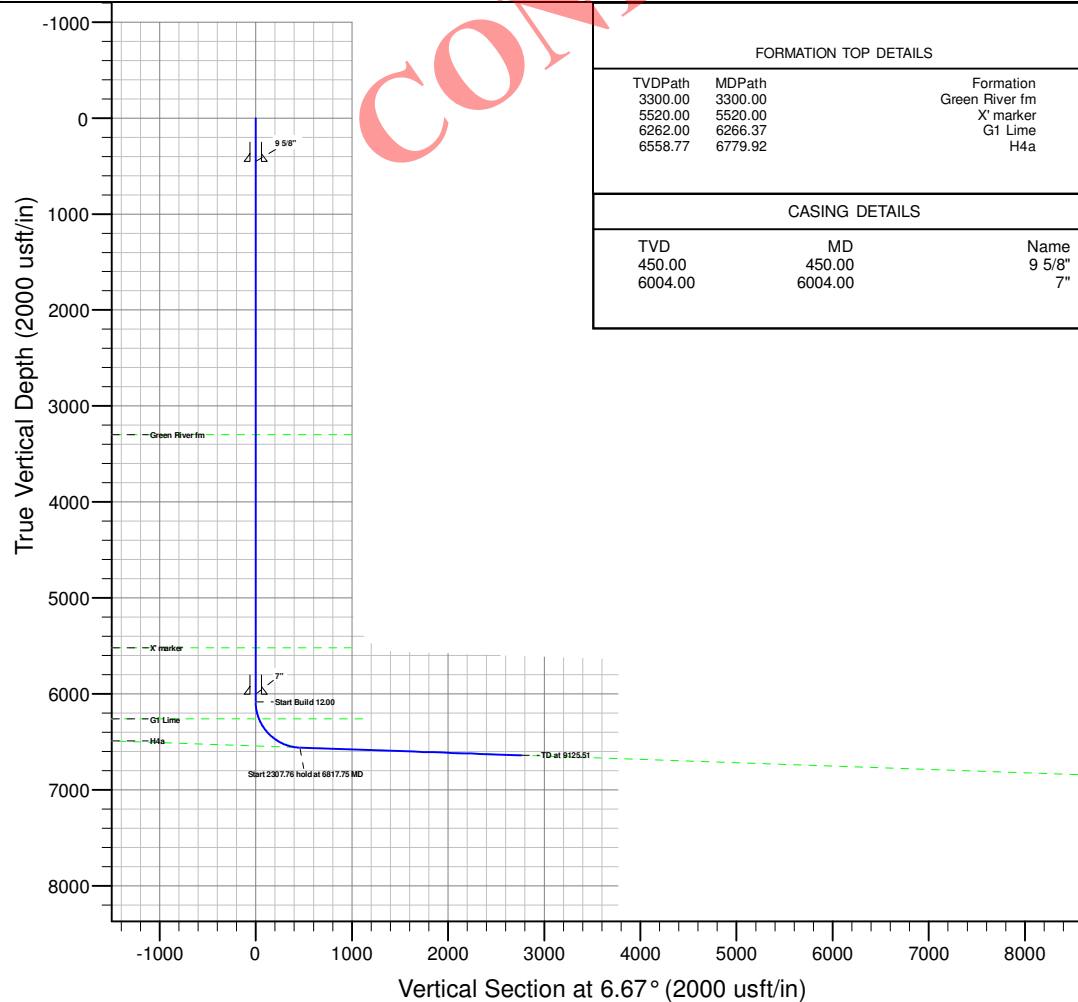
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6084.42	0.00	0.00	6084.42	0.00	0.00	0.00	0.00
6817.75	88.00	6.67	6561.59	457.69	53.50	12.00	460.80
9125.51	88.00	6.67	6642.13	2746.45	321.27	0.00	2767.16

## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3300.00	3300.00	Green River fm
5520.00	5520.00	X' marker
6262.00	6266.37	G1 Lime
6558.77	6779.92	H4a

## CASING DETAILS

TVD	MD	Name
450.00	450.00	9 5/8"
6004.00	6004.00	7"



RECEIVED: March 28, 2012



## **QEP ENERGY (UT)**

**Johnson Bottom**

**JB 4G26-7-21**

**JB 4G26-7-21**

**Lateral #2**

**Plan: Plan ver.0**

## **Standard Planning Report**

**08 February, 2012**

**CONFIDENTIAL**







## QEP Resources, Inc.

## Planning Report



<b>Database:</b>	EDMDB_QEP	<b>Local Co-ordinate Reference:</b>	Well JB 4G26-7-21
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 4989.50usft (EST. RKB)
<b>Project:</b>	Johnson Bottom	<b>MD Reference:</b>	RKB @ 4989.50usft (EST. RKB)
<b>Site:</b>	JB 4G26-7-21	<b>North Reference:</b>	True
<b>Well:</b>	JB 4G26-7-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral #2		
<b>Design:</b>	Plan ver.0		

<b>Project</b>	Johnson Bottom, UT		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		Using geodetic scale factor

<b>Site</b>	JB 4G26-7-21		
<b>Site Position:</b>		<b>Northing:</b>	7,243,034.412 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,190,511.430 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	40.187381
		<b>Longitude:</b>	-109.530806
		<b>Grid Convergence:</b>	1.26 °

<b>Well</b>	JB 4G26-7-21		
<b>Well Position</b>	<b>+N/-S</b>	-0.02 usft	<b>Northing:</b> 7,243,034.396 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 2,190,511.431 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	4,975.50 usft
		<b>Latitude:</b>	40.187381
		<b>Longitude:</b>	-109.530806
		<b>Ground Level:</b>	4,975.50 usft

<b>Wellbore</b>	Lateral #2				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/8/2012	11.03	66.00	52,362

<b>Design</b>	Plan ver.0			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	5,954.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	165.96

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
5,954.00	0.00	0.00	5,954.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,868.15	92.50	165.96	6,519.70	-573.27	143.41	10.12	10.12	0.00	165.96	
10,326.73	92.50	165.96	6,368.84	-3,925.27	981.92	0.00	0.00	0.00	0.00	JB 4G26-7-21 Target :

<b>Planned Survey</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,954.00	0.00	0.00	5,954.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,868.15	92.50	165.96	6,519.70	-573.27	143.41	590.94	10.12	10.12	0.00	
10,326.73	92.50	165.96	6,368.84	-3,925.27	981.92	4,046.22	0.00	0.00	0.00	



## QEP Resources, Inc.

## Planning Report



<b>Database:</b>	EDMDB_QEP	<b>Local Co-ordinate Reference:</b>	Well JB 4G26-7-21
<b>Company:</b>	QEP ENERGY (UT)	<b>TVD Reference:</b>	RKB @ 4989.50usft (EST. RKB)
<b>Project:</b>	Johnson Bottom	<b>MD Reference:</b>	RKB @ 4989.50usft (EST. RKB)
<b>Site:</b>	JB 4G26-7-21	<b>North Reference:</b>	True
<b>Well:</b>	JB 4G26-7-21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Lateral #2		
<b>Design:</b>	Plan ver.0		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
JB 4G26-7-21 Target #2	0.00	0.00	6,368.84	-3,925.27	981.92	7,239,132.016	2,191,579.436	40.176606	-109.527292
- plan hits target center									
- Point									

Formations							
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction		
(usft)	(usft)			(°)	(°)		
3,300.00	3,300.00	Green River fm		0.00			
5,520.00	5,520.00	X' marker		0.00			
6,279.66	6,262.00	G1 Lime		0.00			
6,826.92	6,520.00	H4a		2.50	345.96		



# Company Name: QEP ENERGY (UT)



Azimuths to True North  
 Magnetic North: 11.03°  
 Magnetic Field  
 Strength: 52361.5enT  
 Dip Angle: 66.00°  
 Date: 2/8/2012  
 Model: IGRF2010

Project: Johnson Bottom  
 Site: JB 4G26-7-21  
 Well: JB 4G26-7-21  
 Wellbore: Lateral #2  
 Design: Plan ver.0

WELL DETAILS: JB 4G26-7-21  
Lateral #2

## REFERENCE INFORMATION

PROJECT DETAILS: Johnson Bottom

Ground Level:

4975.50

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	7243034.396	2190511.431	40.187380	-109.530806	

Co-ordinate (N/E) Reference: Well JB 4G26-7-21, True North  
 Vertical (TVD) Reference: RKB @ 4989.50usft (EST. RKB)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: RKB @ 4989.50usft (EST. RKB)  
 Calculation Method: Minimum Curvature

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Central Zone

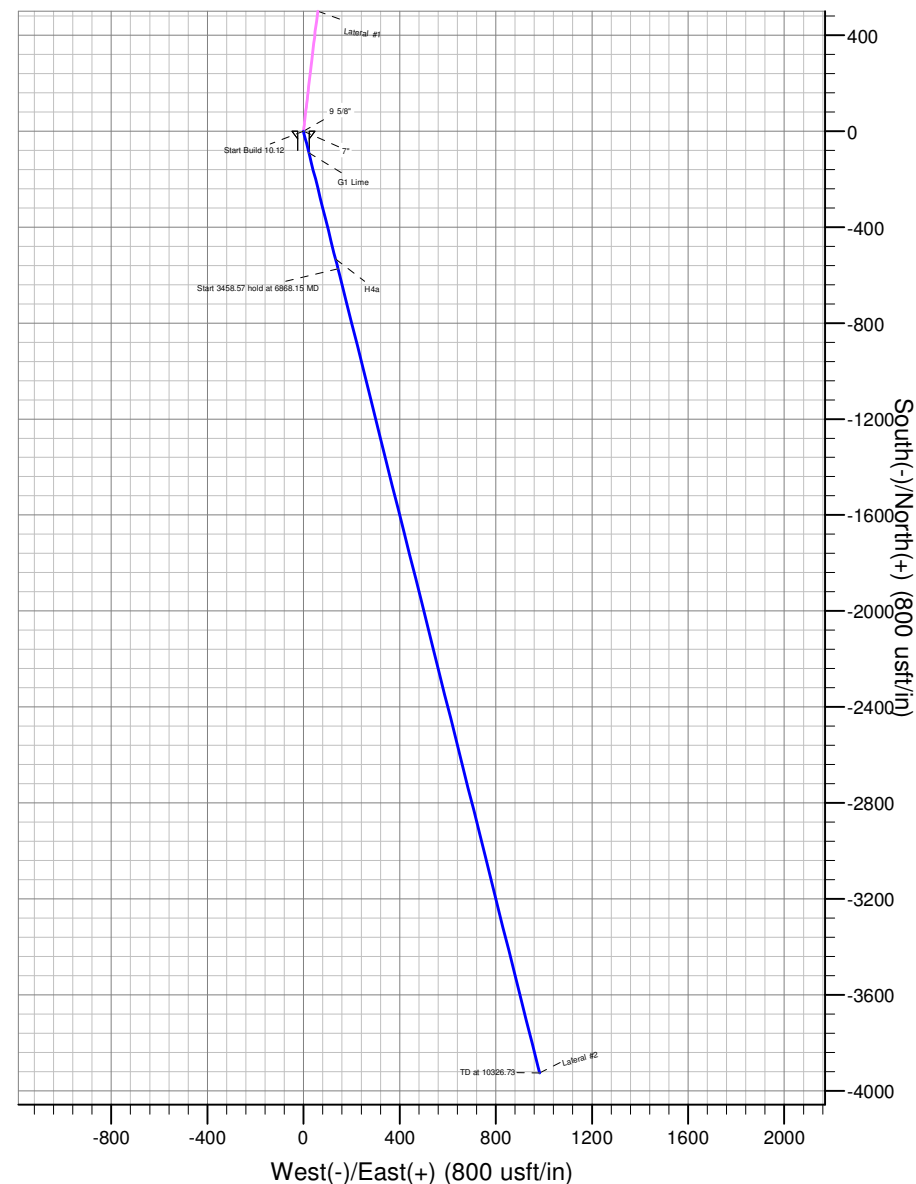
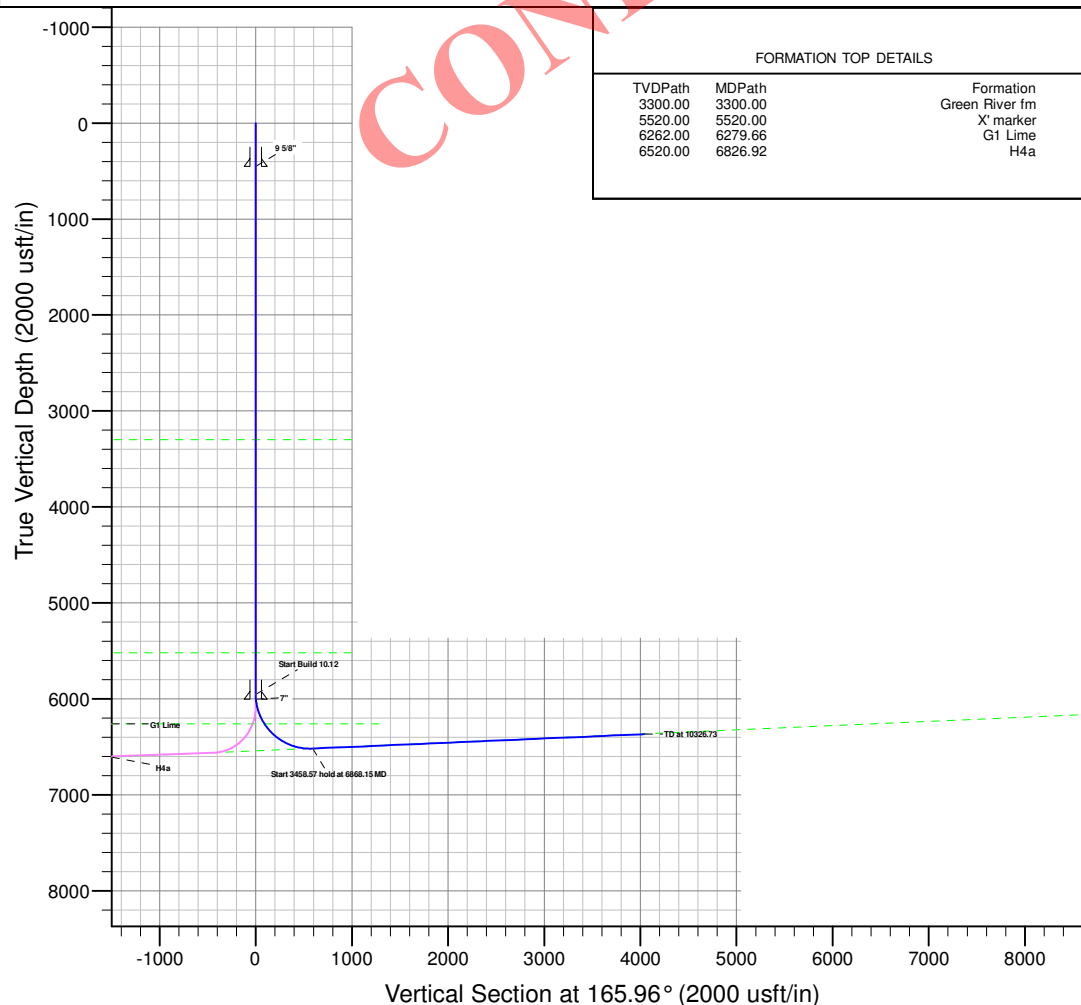
System Datum: Mean Sea Level

## SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
5954.00	0.00	0.00	5954.00	0.00	0.00	0.00	0.00
6868.15	92.50	165.96	6519.70	-573.27	143.41	10.12	590.94
10326.73	92.50	165.96	6368.84	-3925.27	981.92	0.00	4046.22

## FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
3300.00	3300.00	Green River fm
5520.00	5520.00	X' marker
6262.00	6279.66	G1 Lime
6520.00	6826.92	H4a



RECEIVED: March 28, 2012

### **Additional Operator Remarks**

QEP Energy Company proposes to drill the JB 4G-26-7-21 and drill a dual lateral horizontal oil well to test the H4a Member of the Green River Formation. If productive, casing will be run and the well completed. If dry, the well be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Oil & Gas Order No. 1

Please be advised that QEP Energy Company agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No.ESB000024. The principal is QEP Energy Company via surety as consent as provided for the 43 CFR 3104.2.

### **Information for Dual Laterals**

#### **Surface Location**

759' FNL, 307' FWL, NWNW, Section 26, T7S, R21E, Lease Number UTU-73680

#### **Lateral 1**

1980' FSL, 660' FWL, NWSW, Section 23, T7S, R21E, Lease Number UTU-74419  
2748.88 Lateral Leg Length @ 6.67 Azimuth (See Attached Drilling Plans)  
TD: 9,125' MD

#### **Lateral 2**

660' FSL, 1320' FWL, SESW, Section 26, T7S, R21E, Lease Number UTU-73680  
3925.27 Lateral Leg Length @ 165.96 Azimuth (See Attached Drilling Plans)  
TD: 10,326' MD

CONFIDENTIAL

**QEP ENERGY COMPANY  
JB 4G-26-7-21  
NWNW, SECTION 26, T7S, R21E  
UINTAH COUNTY, UT  
LEASE # UTU-73680**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

An onsite inspection was conducted for the JB 4G-26-7-21 on March 12, 2012. Weather conditions were chilly at the time of the onsite. In attendance at the inspection were the following individuals:

Aaron Roe	Bureau of Land Management
Kevin Sadlier	Bureau of Land Management
Dan Emmett	Bureau of Land Management
Katie Nash	Bureau of Land Management
Jan Nelson	QEP Energy Company
Stephanie Tomkinson	QEP Energy Company
Ryan Angus	QEP Energy Company
Benna Muth	QEP Energy Company
Eric Wickersham	QEP Energy Company
McCoy Anderson	Uintah Engineering & Land Surveying

**1. Existing Roads:**

See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing roads.

The proposed well site is located approximately 24 miles southeast of Myton, Utah.

-See attached TOPO Map "A".

Existing roads will be upgraded, maintained and repaired as necessary.

**2. Planned Access Roads:**

**An offlease right-of-way is not required. The entire well pad and access road are located within the Johnson Bottom Unit.**

There will be a new access road approximately 2,352' in length, 30' in width, containing approximately 1.620 acres.

New access roads on BLM surface will be crowned (2 to 3%), ditched, and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet. Any additional disturbance required due to intersections or sharp curves will be discussed at the on-site and approved by the State.

Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. Surface disturbance and vehicular traffic will be



limited to the approved location and access route or, as proposed by the Operator. The road surface and shoulders will be kept in a safe and usable condition and will be maintained in accordance with the original construction standards.

If culverts are needed, the location and size of the culverts will be proposed during the on-site. The operator will clean and maintain approved culverts as needed.

All drainage ditches and culverts will be kept clear and free-flowing and will be maintained according to original construction standards.

The access road disturbed area will be kept free of trash during operations. All traffic will be confined to the approved road running surface. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause excess siltation or accumulation of debris in the drainage nor shall the drainage be blocked by the roadbed.

Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Should mud holes develop, the holes shall be filled in and detours around the holes avoided.

When snow is removed from the road during the winter months, the snow should be pushed outside of the borrow ditches, and the turnouts kept clear so that snowmelt will be channeled away from the road.

Refer to Topo Map B for the location of the proposed access

**3. Location of Existing Wells Within a 1-Mile Radius:**

A map will be provided with the site-specific APD showing the location of existing wells within a one mile radius.

Please refer to Topo map C.

**4. Location of Existing and Proposed Facilities:**

The following guidelines will apply if the well is productive.

A containment dike will be constructed completely around those production facilities which contain fluids (i.e., production tanks, produced water tanks). These dikes will be constructed of compacted impervious subsoil; hold 110% of the capacity of the largest tank; and, be independent of the back cut. If a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required by the Environmental Protection Agency, the containment dike may be expanded to meet SPCC requirements with approval by the BLM/VFO AO. The specific APD will address additional capacity if such is needed due to environmental concerns. The use of topsoil for the construction of dikes will not be allowed.

All loading lines will be placed inside the berm surrounding the tank batteries.

All permanent (on site six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a color approved by the BLM.

It was determined on the onsite by the BLM VFO/AO that the facilities will be painted Covert Green.

**Surface gas pipelines will be constructed in accordance with the following guidance:**

**GAS SALES LINE:** The pipeline will be unpainted steel, 4" inside diameter, welded, schedule # 20 or greater. The pipeline will be 4,785' in length, containing approximately 3.295 acres. The pipeline will be strung along the right-of-way and welded into place. The pipeline will tie into our existing line located on the BBS 15G-22-7-21, Sec. 22, T7S, R21E.

**FUEL GAS LINE:** The pipeline will be a 2" inside diameter, poly pipe with a rating of 160 psi or greater. The line will be laid adjacent to the gas sales line following the line to location.

**5. Location and Type of Water Supply:**

Fresh water will be obtained from Wonsits Valley water right # 49-251 (which was filed on May 7, 1964,) or Red Wash water right # 49-2153 (which was filed on March 25, 1960). It was determined by the Fish and Wildlife Service that any water right number filed before 1989 is not depleting to the Upper Colorado River System, to supply fresh water for drilling purposes. Fresh water may also be obtained from Neil Moon Pond water right #43-11787, or Myton City Water, Myton, Utah

**6. Source of Construction Materials:**

Surface and subsoil materials in the immediate area will be utilized.

Any gravel will be obtained from a commercial source.

**7. Methods of Handling Waste Materials:**

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids including salts and chemicals will be contained in the reserve pit. Upon termination of drilling and completion operations, the liquid contents of the reserve pit will be used at the next drill site or will be removed and disposed of at an approved waste disposal facility within 6 months after drilling is terminated. Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1.

Unless specified in the site specific APD, the reserve pit will be constructed on the location and will not be located within natural drainages, where a flood



hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break, or allow discharge of liquids.

It was determined at the on-site inspection that a pit liner is necessary; the reserve pit will be lined with a synthetic reinforced liner, a minimum of 20 millimeters thick, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap will be disposed of in the pit.

Reserve pit leaks are considered an undesirable event and will be orally reported to the AO.

#### **Disposal of Produced Water:**

After first production, produced wastewater will be confined to the approved pit or storage tank for a period not to exceed 90 days. During the 90 day period, in accordance with Onshore Order # 7, all produced water will be contained in tanks on location.

After the 90 day period, the produced water will be contained in tanks on location and then hauled by truck to the following pre-approved disposal site:

West End Disposal located in the NESE, Section 28, T7S, R22E,  
NBE 12 SWD-10-9-23 located in the NWSW, Section 10, 9S, 23E,  
Lapoint Recycle & Storage located in Sec. 12, T5S, R19E, Uintah County, UT

Produced water, oil, and other byproducts will not be applied to roads or well pads for control of dust or weeds. The dumping of produced fluids on roads, well sites, or other areas will not be allowed.

Any spills of oil, gas, salt water, or other noxious fluids will be immediately cleaned up and removed to an approved disposal site. The spills will be reported to the AO and other authorities as appropriate.

A chemical porta-toilet will be furnished with the drilling rig. The chemical porta-toilet wastes will be hauled to Ashley Valley Sewer and Water System for disposal.

Garbage, trash, and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. Trash will not be burned on location. All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig. All trash and waste material will be hauled to the Uintah County Landfill.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of wells. Furthermore, extremely hazardous substances, as defined in



40 CFR 355, in threshold planning quantities, will not be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of wells within these areas. Specific APD's shall address any modifications from this policy.

**8. Ancillary Facilities:**

This will be an independent well location. Product will be contained in two 500 bbl tanks and then transported from location to delivery site.  
A suitable muffler will be installed on pumping unit to help reduce noise control.

**9. Well Site Layout:**

A Location Layout Diagram describing drill pad cross-sections, cuts and fills, and locations of mud tanks, reserve pits, flare pit or flare box, pipe racks, trailer parking, spoil dirt stockpile(s), and the surface material stockpile(s) will be included with the site specific APD.

Please see the attached diagram rig orientation, parking areas, and access roads, as well as the location of the following:

The reserve pit.

The stockpiled topsoil will not be used for facility berms. All brush removed from the well pad during construction will be stockpiled with the topsoil.

The flare pit or flare box will be located downwind from the prevailing wind direction.

Any drainage that crosses the well location will be diverted around the location by using ditches, water diversion drains or berms. If deemed necessary at the on-site, erosion drains may be installed to contain sediments that could be produced from access roads and well locations.

**10. Fencing Requirements:**

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

All pits will be fenced according to the following minimum standards:

39 inch net wire will be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.

The net wire shall be no more than two inches above the ground. The barbed wire shall be three inches over the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.

Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

All wire shall be stretched using a stretching device before it is attached to corner posts.

The reserve pit will be fenced on three (3) sides during drilling operations. The fourth side will be put in place when the rig moves off location. The pit will be fenced and maintained until it is backfilled. If drilling operations does not commence within 3 days, the fourth side of the fence will be installed.

**11. Reclamation Plan:**

Reclamation will follow QEP Energy Company, Uinta Basin Division's Reclamation Plan, September 2009 (QEP Energy Plan) and the BLM Green River District Reclamation Guidelines.

All trash and debris will be removed from the disturbed area.

The disturbed area will be backfilled with subsoil.

Topsoil will be spread to an even, appropriate depth and disced if needed.

Water courses and drainages will be restored.

Erosion control devices will be installed where needed.

Seeding will be done in the fall, prior to ground freeze up.

Seed mix will be submitted to a BLM AO for approval prior to seeding.

Monitoring and reporting will be conducted as stated in QEP Energy Company's Reclamation Plan. Weed control will be conducted as stated in QEP Energy Company's Reclamation Plan.

A reference site and weed data sheet have been established and are included in this application. Please see attached Weed Data Sheet.

**Dry Hole/Abandoned Location:**

On lands administered by the BLM abandoned well sites, roads, and other disturbed areas will be restored as near as practical to their original condition. Where applicable, these conditions may include the reestablishment of irrigation systems; reestablishment of appropriate soil conditions; and, the reestablishment of vegetation as specified.



All disturbed surfaces will be recontoured to approximate natural contours, with reclamation of the well pad and access road to be performed as soon as practical after final abandonment.

At final abandonment, the Operator will cap the casing with a metal plate a minimum of 0.25 inch thick. The cap will be welded in place and the well location and identity will be permanently inscribed on the cap. The cap will be constructed with a weep hole. The depth of the permanent cap will be determined at the time of final abandonment. Long-term reclamation will then be applied and will follow the reclamation process described in this plan. When reclamation is deemed successful by the Operator and the BLM, the Operator will request a bond release.

**12. Surface Ownership:**

The well pad and access road are located on lands owned by:  
Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078

**13. Other Information:**

Drilling rigs and/or equipment used during drilling operations will not be stacked or stored on Federal lands or State administered lands after the conclusion of drilling operations or at any other time without authorization by the BLM Authorized Officer. If BLM authorization is obtained, such storage is only a temporary measure.

A Class III archeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted on January 23, 2011, **State of Utah Antiquities Report U-11-MQ-1140b,s** by Montgomery Archaeology Consultants. Cultural resource clearance has been recommended for this project.

A paleontological survey was conducted by Intermountain Paleo Consulting. A copy of this report was submitted on February 1, 2012, **Report No. IPC 11-154** by Stephen D. Sandau. The inspection resulted in the location of no fossil resources. However, if vertebrate fossil(s) are found during construction a paleontologist should be immediately notified. QEP will provide Paleo monitor if needed.

**Per the onsite meeting on March 12, 2012,** the following items were requested/discussed.

There is a Burrowing Owl Stipulation from March 1 to August 31. No construction or drilling will commence during this period unless otherwise determined by a wildlife biologist that the site is inactive.

There is 6" topsoil.



**Lessee's or Operator's Representative & Certification:**

Valyn Davis  
Regulatory Affairs Analyst  
QEP Energy Company  
11002 East 17500 South  
Vernal, UT 84078  
(435) 781-4369

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

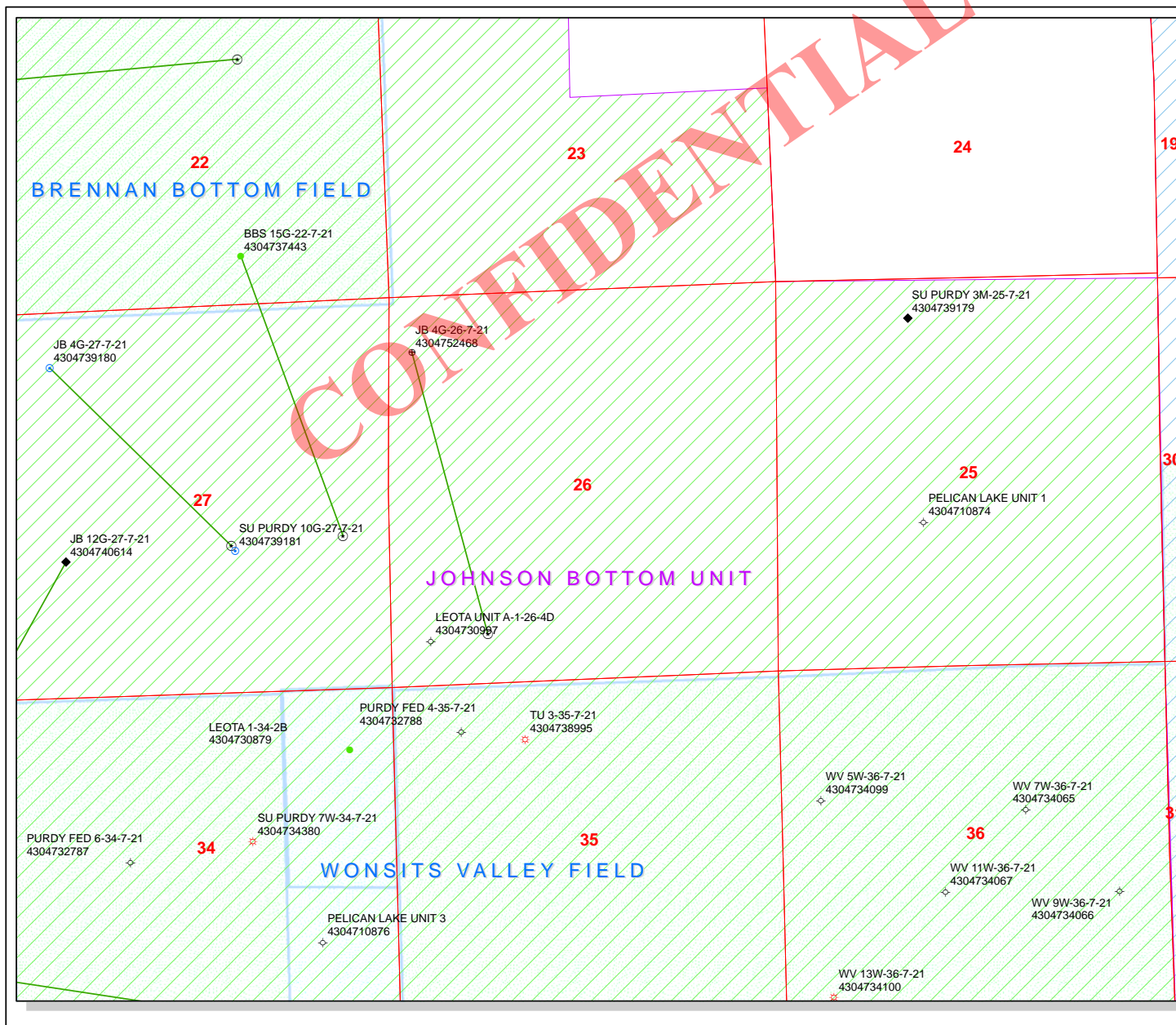
QEP Energy Company is considered to be the operator of the subject well.  
QEP Energy Company agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104.2 for lease activities is being provided by  
Bond No. ESB000024

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operations; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

  
\_\_\_\_\_  
Valyn Davis

3/28/2012  
\_\_\_\_\_  
Date



API Number: 4304752468

Well Name: JB 4G-26-7-21

Township T0.7 . Range R2.1 . Section 26

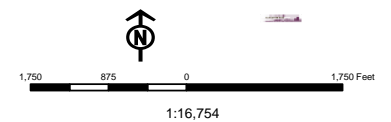
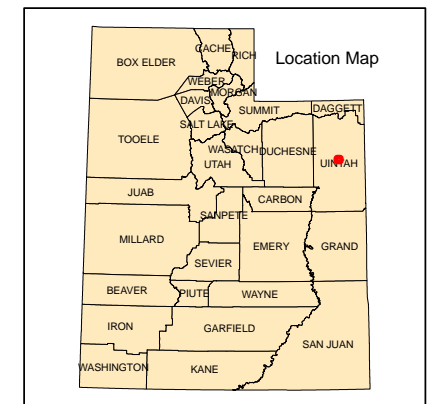
Meridian: SLBM

Operator: QEP ENERGY COMPANY

Map Prepared:

Map Produced by Diana Mason

Units Status	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERM	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
	SGW - Shut-in Gas Well
	SOW - Shut-in Oil Well
	TA - Temp. Abandoned
	TW - Test Well
	WDW - Water Disposal
	WW - Water Injection Well
	WSW - Water Supply Well



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

March 30, 2012

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2012 Plan of Development Johnson Bottom,  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following horizontal well is planned for calendar year 2012 within the Johnson Bottom Unit, Uintah County, Utah

API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-047-52468	JB 4G-26-7-21	Sec 26 T07S R21E 0759 FNL 0307 FWL
	Lateral 1	Sec 23 T07S R21E 1980 FSL 0660 FWL
	Lateral 2	Sec 26 T07S R21E 0660 FSL 1320 FWL

This office has no objection to permitting the well at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,  
ou=Branch of Minerals, email=Michael\_Coulthard@blm.gov, c=US  
Date: 2012.03.30 13:46:14 -06'00'

bcc: File - Johnson Bottom Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:3-30-12

RECEIVED: March 30, 2012



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 3/28/2012

API NO. ASSIGNED: 43047524680000

WELL NAME: JB 4G-26-7-21

OPERATOR: QEP ENERGY COMPANY (N3700)

PHONE NUMBER: 435 781-4369

CONTACT: Valyn Davis

PROPOSED LOCATION: NWNW 26 070S 210E

Permit Tech Review: ☒

SURFACE: 0759 FNL 0307 FWL

Engineering Review: ☐

BOTTOM: 0660 FSL 1320 FWL

Geology Review: ☒

COUNTY: Uintah

LATITUDE: 40.18735

LONGITUDE: -109.53081

UTM SURF EASTINGS: 625069.00

NORTHINGS: 4449586.00

FIELD NAME: UNDESIGNATED

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU73680

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: FEDERAL - ESB000024☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: 49-251/ 49-2153☐ RDCC Review:☐ Fee Surface Agreement☐ Intent to Commingle

Commingle Approved

## LOCATION AND SITING:

☐ R649-2-3.

Unit: JOHNSON BOTTOM

☐ R649-3-2. General☒ R649-3-3. Exception☒ Drilling Unit

Board Cause No: R649-3-3

Effective Date:

Siting:

☐ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 1 - Exception Location - dmason  
4 - Federal Approval - dmason  
23 - Spacing - dmason  
27 - Other - bhill

RECEIVED: April 04, 2012



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** JB 4G-26-7-21

**API Well Number:** 43047524680000

**Lease Number:** UTU73680

**Surface Owner:** FEDERAL

**Approval Date:** 4/4/2012

### Issued to:

QEP ENERGY COMPANY, 11002 East 17500 South, Vernal, Ut 84078

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-3. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being

drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284  
(please leave a voicemail message if not available)  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website  
at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

MAR 29 2012

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

## APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU73680	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator QEP ENERGY COMPANY		7. If Unit or CA Agreement, Name and No. UTU86617X	
Contact: VALYN DAVIS E-Mail: Valyn.Davis@qepres.com		8. Lease Name and Well No. JB 4G-26-7-21	
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078		9. API Well No. 43-047-52468	
3b. Phone No. (include area code) Ph: 435-781-4369 Fx: 435-781-4395		10. Field and Pool, or Exploratory UNDESIGNATED	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNW 759FSL 307FWL 40.187381 N Lat, 109.530806 W Lon At proposed prod. zone NWSW 1980FSL 660FWL 40.194925 N Lat, 109.529656 W Lon sec. 23		11. Sec., T., R., M., or Blk. and Survey or Area Sec 26 T7S R21E Mer SLB	
14. Distance in miles and direction from nearest town or post office* 36 MILES +/- SOUTHEAST OF VERNAL, UTAH		12. County or Parish UINTAH	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 307'		13. State UT	
16. No. of Acres in Lease 1280.00		17. Spacing Unit dedicated to this well 40.00	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. +/- 2650'		20. BLM/BIA Bond No. on file ESB000024	
19. Proposed Depth 6084 MD 6084 TVD		23. Estimated duration 30 DAYS	
21. Elevations (Show whether DF, KB, RT, GL, etc.) 4978 GL		22. Approximate date work will start 08/01/2012	

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature (Electronic Submission)	Name (Printed/Typed) VALYN DAVIS Ph: 435-781-4369	Date 03/28/2012
Title REGULATORY AFFAIRS ANALYST		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date SEP 07 2012
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

## CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## Additional Operator Remarks (see next page)

Electronic Submission #134165 verified by the BLM Well Information System  
For QEP ENERGY COMPANY, sent to the Vernal  
Committed to AFMSS for processing by LESLIE ROBINSON on 04/05/2012RECEIVED  
SEP 17 2012

## NOTICE OF APPROVAL

UDOGM

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

DIV. OF OIL, GAS &amp; MINING

1000411111 AG

1000411111 AG



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: QEP Energy, Inc.  
Well No: JB 4G-26-7-21  
API No: 43-047-52468

Location: NWNW, Sec. 26, T7S, R21E  
Lease No: UTU-73680  
Agreement: Johnson Bottom Unit

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit was processed using a 390 CX tied to NEPA approved 03/31/2008. Therefore, this permit is approved for a two (2) year period OR until lease expiration OR the well must be spud by 03/31/2013 (5 years from the NEPA approval date), whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm ut vn opreport@blm.gov</a> .
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

***SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)***

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- This project will be implemented on or after the sundry approval date. If the well has not been spudded by March 31, 2013 this sundry will expire and the operator is to cease all operations related to preparing to drill the well.
- If paleontologic resources are uncovered during construction activities, the operator shall immediately suspend all operations that will further disturb such resources, and immediately notify the Authorized Officer (AO). The AO will arrange for a determination of significance and, if necessary, recommend a recovery or avoidance plan.
- Prior to construction, an invasive plants/noxious weeds inventory will be completed for all areas where surface disturbance will occur, and a completed Weed Inventory Form will be submitted to the BLM Authorized Officer.
- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were brought in from areas outside the Uinta Basin, to prevent weed seed introduction.
- In the event historic or archaeological resources are uncovered during construction, work will stop immediately and the appropriate BLM AO will be notified.
- All permanent (meaning on site for six months or longer) structures will be painted Covert Green to match the surrounding landscape color unless otherwise authorized. This will include all facilities except those required to comply with Occupational Safety and Health Act (OSHA) regulations.
- Reclamation will be completed in accordance with the QEP Reclamation Plan on file with the Vernal Field Office of the BLM.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) 3 growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the Green River District Reclamation Guidelines have been met (30% or greater basal cover).



- Construction and drilling is not allowed from March 1 – August 31 to minimize impacts during Burrowing owl nesting. If it is anticipated that construction or drilling will occur during the given timing restrictions, a BLM or qualified biologist shall be notified so surveys can be conducted. Depending upon the results of the surveys, permission to proceed may or may not be recommended or granted by the BLM biologist.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- A formation integrity test shall be performed at the surface casing shoe.
- Gamma Ray Log shall be run from Total Depth to Surface.

**Variances Granted**

**Air Drilling**

- Dust suppression equipment. Variance granted for water mist system to substitute for the dust suppression equipment.
- Blooie line discharge 100' from the well bore, variance granted for blooie line discharge to be 75' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for truck/trailer mounted air compressors.
- Straight run blooie line. Variance granted for targeted "T's" at bends.
- Automatic igniter. Variance granted for igniter due to water mist.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:**

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,



core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU73680
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> JOHNSON BOTTOM
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> JB 4G-26-7-21
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0759 FNL 0307 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 26 Township: 07.0S Range: 21.0E Meridian: S		<b>9. API NUMBER:</b> 43047524680000
<b>9. FIELD and POOL or WILDCAT:</b> UNDESIGNATED		<b>COUNTY:</b> UINTAH
<b>STATE:</b> UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 10/12/2012	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
 ON 10/12/2012- DRILLED 40' OF 20" CONDUCTOR HOLE. SET 40' OF 14" CONDUCTOR PIPE. CEMENTED WITH READY MIX.

Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
**FOR RECORD ONLY**  
 October 16, 2012

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 10/15/2012	

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: QEP ENERGY COMPANY Operator Account Number: N 3700  
Address: 11002 EAST 17500 SOUTH  
city VERNAL  
state UT zip 84078 Phone Number: (435) 781-4369

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752468	JB 4G-26-7-21		NWNW	26	7S	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
B	99999	18755	10/12/2012		10/24/12		
Comments: <u>GRRV</u> <u>BHL: 523 NWSW</u> <b>CONFIDENTIAL</b>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
Comments:							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to new entity
- E - Other (Explain in 'comments' section)

Valyn Davis

Name (Please Print)

*Valyn Davis*

Signature

Regulatory Affairs Analyst

10/15/2012

Title

Date

**RECEIVED**  
OCT 15 2012

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU73680
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> JOHNSON BOTTOM
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South , Vernal, Ut, 84078		<b>8. WELL NAME and NUMBER:</b> JB 4G-26-7-21
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0759 FNL 0307 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 26 Township: 07.0S Range: 21.0E Meridian: S		<b>9. API NUMBER:</b> 43047524680000
<b>9. FIELD and POOL or WILDCAT:</b> UNDESIGNATED		<b>COUNTY:</b> UINTAH
<b>STATE:</b> UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION	OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <b>12/5/2012</b>	<input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME		
<input type="checkbox"/> SPUD REPORT Date of Spud:				
<input type="checkbox"/> DRILLING REPORT Report Date:				

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  

THIS WELL COMMENCED PRODUCTION ON DECEMBER 5, 2012 @ 5:00 P.M.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**

**FOR RECORD ONLY**

December 10, 2012

<b>NAME (PLEASE PRINT)</b> Valyn Davis	<b>PHONE NUMBER</b> 435 781-4369	<b>TITLE</b> Regulatory Affairs Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 12/10/2012	



STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

AMENDED REPORT ☐ FORM 8

(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:

UTU75080

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. TYPE OF WELL:		OIL WELL <input checked="" type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input type="checkbox"/>	OTHER <input type="checkbox"/>	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
b. TYPE OF WORK:		NEW WELL <input checked="" type="checkbox"/>	HORIZ. LATS. <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	RE-ENTRY <input type="checkbox"/>	7. UNIT or CA AGREEMENT NAME <b>JOHNSON BOTTOM</b>
2. NAME OF OPERATOR:		QEP ENERGY COMPANY				8. WELL NAME and NUMBER: <b>JB 4G-26-7-21</b>
3. ADDRESS OF OPERATOR:		11002 E. 17500 S. CITY <b>VERNAL</b> STATE <b>UT</b> ZIP <b>84078</b>				9. API NUMBER: <b>4304752468</b>
4. LOCATION OF WELL (FOOTAGES)		AT SURFACE: <b>NWNW, 759' FNL, 307' FWL</b>				10 FIELD AND POOL, OR WILDCAT <b>UNDESIGNATED</b>
		AT TOP PRODUCING INTERVAL REPORTED BELOW: <b>1 LEG HORIZONTAL (SEE REMARKS)</b>				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>NWNW 26 7S 21E</b>
		AT TOTAL DEPTH: <b>683 FSL 1325 FWL (SEE REMARKS) BHL by HSM DOGM</b>				12. COUNTY <b>UINTAH</b>
						13. STATE <b>UTAH</b>

14. DATE SPURRED: <b>10/12/2012</b>	15. DATE T.D. REACHED: <b>11/14/2012</b>	16. DATE COMPLETED: <b>11/17/2012</b>	ABANDONED <input type="checkbox"/>	READY TO PRODUCE <input checked="" type="checkbox"/>	17. ELEVATIONS (DF, RKB, RT, GL): <b>4976 GL</b>
18. TOTAL DEPTH: MD <b>10,207</b> TVD <b>6377</b>	19. PLUG BACK T.D.: MD TVD	20. IF MULTIPLE COMPLETIONS, HOW MANY? *		21. DEPTH BRIDGE MD PLUG SET: TVD	
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) <b>TRIPLE COMBO, IQ DEPTH AND SURVEY</b>			23.		
			WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis)		
			WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report)		
			DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)		

**24. CASING AND LINER RECORD (Report all strings set in well)**

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
12.25	9.625 J-55	36	0	485		G 300	61		
8.75	7 N-80	26	0	5,940		G 145	38	0	
6.125	4.5 P-11	11.6	0	9,632		NONE			

**25. TUBING RECORD**

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	5,322							

**26. PRODUCING INTERVALS**

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) GREEN RIVER	5,329	9,632						Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

**27. PERFORATION RECORD**

**28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.**

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
5329 - 9632	50,000 GAL 15% HCL IN SIX STAGES

**29. ENCLOSED ATTACHMENTS:**

- ☐ ELECTRICAL/MECHANICAL LOGS      ☐ GEOLOGIC REPORT      ☐ DST REPORT      ☒ DIRECTIONAL SURVEY  
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION      ☐ CORE ANALYSIS      ☒ OTHER: **OPS SUMMARY**

**30. WELL STATUS:**

**POW**

**RECEIVED**

**JAN 18 2013**

## 31. INITIAL PRODUCTION

## INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 12/5/2012		TEST DATE: 12/9/2012		HOURS TESTED: 24		TEST PRODUCTION RATES: →	OIL – BBL: 113	GAS – MCF: 0	WATER – BBL: 160	PROD. METHOD: GPU
CHOKE SIZE:	TBG. PRESS. 205	CSG. PRESS. 23	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL: 113	GAS – MCF: 0	WATER – BBL: 160	INTERVAL STATUS:

## INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

## 32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

USED ON LEASE

## 33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

## 34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				UINTAH GREEN RIVER H4a LIME	0 3,300 6,922

## 35. ADDITIONAL REMARKS (Include plugging procedure)


SEE ATTACHED

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) BENNA MUTH

TITLE REGULATORY ASSISTANT - CONTRACT

SIGNATURE



DATE 1/14/2013

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340  
Fax: 801-359-3940

ADDITIONAL INFORMATION FOR

WELL COMPLETION REPORT

WELL # JB-4G-26-7-21

#4: L1, TOP PRODUCING INTERVAL: 759' FNL, 307' FWL, NWNW, SEC. 26, T7S, R21E

L1, TOTAL DEPTH: 587' FSL, 1324' FWL, SESW, SEC. 26, T7S, R21E

#27: PERFORATIONS: BLANK LINER FROM 5329' – 6398', ALTER SLOTTED LINER AND BLANK LINER FROM 6398' – 9632'; HOLE IS OPEN TO PRODUCTION FROM THE BASE OF 7" CASING (5940') TO TD.



QEP Energy Company

## Daily Activity and Cost Summary

Well Name: JB 4G-26-7-21

API 43-047-52468		Surface Legal Location Sec 26 T7S R20E		Field Name UNDESIGNATED		State Utah		Well Configuration Type Horizontal	
Ground Elevation (ft) 4,975.5		Casing Flange Elevation (ft) 4,975.50		Current KB to GL (ft) 16.00		Current KB to CF (ft) 16.00		Spud Date 10/10/2012 14:00	
Job Category Drilling		Primary Job Type DRILLING		Secondary Job Type DEVELOPMENT		Objective			
Start Date 10/10/2012				Job End Date 10/30/2012					
Purpose									
Summary									
Contractor Pete Martin Drilling				Rig Number PETE MARTIN 1		Rig Type AUGER RIG			
Contractor Pro Petro				Rig Number AIR 8		Rig Type AIR RIG			
Contractor Aztec Drilling				Rig Number AZTEC 950		Rig Type TOP DRIVE			
DOL	Start Date	Summary							
1.0	10/10/2012	MIRU,SET 40' OF 14" CONDUCTOR,RDMO							
2.0	10/12/2012	DRILL TO 515', RUNCASING TO 501', CEMENT.RDMO							
3.0	10/18/2012	RIG DOWN 1 HR, MOVE RIG 12 HR, WAIT ON DAYLIGHT 11 HR							
4.0	10/19/2012	RIG UP 24 HR							
5.0	10/20/2012	RIG UP 7 HR, BOP TEST 4 HR, RIG REPAIR 2.5 HR, PICK UP BHA 2.5 HR, CUT DRILL LINE 1 HR, DRILL PLUG 3 HR, DRILL ACTUAL 2.5 HR, F.I.T. .5 HR, TRIP 1 HR							
6.0	10/21/2012	ROTARY DRILL 23.5 HR, RIG SERVICE 0.5 HR							
7.0	10/22/2012	ROTARY DRILL 23 HR, RIG SERVICE 1 HR							
8.0	10/23/2012	ROTARY DRILL 22 HR, RIG SERVICE 1HR, FLOW CHECK 0.5 HR, CIRCULATE BUILD VOL. 0.5 HR							
9.0	10/24/2012	ROTARY DRILL 17.5 HR, RIG SERVICE 0.5 HR, CIRCULATE 1 HR, TRIP 5 HR							
10.0	10/25/2012	TRIP (x 2) 11.5 HR, BHA (x 2) 5 HR, RIG SERVICE 0.5 HR, CORE 5 HR, CIRCULATE 1.5 HR, WASH & REAM 0.5 HR							
11.0	10/26/2012	DRILL 12 HR, RIG SERVICE 0.5 HR, CIRCULATE 1 HR, LAYDOWN CORE 1 HR, WASH & REAM 0.5 HR, TRIP 9 HR							
12.0	10/27/2012	TRIP 8.5 HR, R/U - LOG - R/D 6 HR, CIRCULATE 1 HR, R/U L/D EQUIPMENT 0.5 HR, LDDP 6 HR, PULL WEAR BUSHING 0.5 HR, R/U CASERS 1.5 HR							
13.0	10/28/2012	RUN CASING 7.5 HR, WORK STUCK CASING 10.5 HR, FREEPOINT 2 HR, WAIT ON ORDERS 2 HR, RIG UP CEMENTERS 1 HR, CEMENT 1 HR							
14.0	10/29/2012	CEMENT 2.5 HR, LOG 4 HR, WOO 5.5 HR, ND/NU BOP 6 HR, SET CASING SLIPS 3.5 HR, TEST BOPE 2.5 HR							
15.0	10/30/2012	TEST BOPE 4 HR, CUT & SLIP 2 HR, RIG SERVICE 0.5 HR, RIG REPAIR 4 HR, RU/RD LAY DOWN TRUCK 2 HR, TRIP 8.5 HR, DRLG CEMENT 3 HR							
16.0	10/31/2012	DRILL FLOAT & SHOE RUN FIT TEST TO 9.7 PPG DIRECTIONAL DRILL FROM 6000 FT TO 6227 FT TRIP OUT TO DIAL UP MOTOR BEND							
17.0	11/1/2012	POOH FOR MOTOR BEND WORK BHA TIH WASH TO BOTTOM DRILL FROM 6227 TO 6395 .SURVEY & RIG SERVICE							
18.0	11/2/2012	DIRECTIONAL DRILL, FROM 6395 TO 6555 FT RIG SERVICE, SURVEYS							
19.0	11/3/2012	DIRECTIONAL DRILL FROM 6555 FT TO 6573 FT MIX & PUMP TRIP SLUG POOH FOR BIT # 7 CHANGE OUT BIT, MOTOR, & SCRIB TOOLS TIH PICK UP 6 HWDP AND THE AGITATOR WASH 40' TO BOTTOM DIRECTIONAL DRILL FROM 6573 FT TO 6730 FT							
20.0	11/4/2012	DIRECTIONAL DRILL FROM 6730 TO 6813 RIG SERVICE DRILL FROM 6813 TO 6820 CONNECTIONS & SURVEYS DIRECTIONAL DRILL FROM 6820 TO 6895							
21.0	11/5/2012	DIRECTIONAL DRILL FROM 6895 TO 7165 ENTERED ZONE @ 6922 FEET TVD @ 6532.5 FEET							
22.0	11/6/2012	DIRECTIONAL DRILL FROM 7165 FT TO 7367 CIRC SAMPLES @ 7367 FT. CONT. TO DIRECTIONAL DRILL FROM 7367 FT TO 7470							
23.0	11/7/2012	DRIL F/ 7470 TO 7480 BACK REAM F/ 7480 TO 6857 FT POOH FOR BIT & MOTOR WORK BHA TIH TO THE SHOE CUT DRILLING LINE TIH TO 6973 WASH & REAM F/ 6973 TO 7480 FT DIRECTIONAL DRILL FROM 7480 TO 7636							
24.0	11/8/2012	DIRECTIONAL DRILL FROM 7636 FT TO 8205 FT, CIRC SAMPLES, SHORT TRIP 10 STANDS BACK REAM 445 FEET (7 STANDS) LAST3 STANDS PULL GOOD) WASH & REAM 63 FT TO BOTTOM SURVEY & CONNECTIONS							
25.0	11/9/2012	DIRECTIONAL DRILL F/8204 T/8838, SPOT LUBE PILL -BACK REAM F/8720 T/8294							
26.0	11/10/2012	TRIP FOR BIT MOTOR & DRILL REAM ASSEMBLY REAM FROM 6920 FT TO 7936 FT							
27.0	11/11/2012	REAM WITH DRILL REAM ASSEMBLY FROM 7936 TO 8838 FT DIRECTIONAL DRILL FROM 8838 TO 9204							
28.0	11/12/2012	DIRECTIONAL DRILL FROM 9204 TO 9426 FT RIG SERVICE CONNECTIONS & SURVEYS SHORT TRIP FROM 9426 TO 8791 CONT TO DIRECTIONAL DRILL F/9426 TO 9535 FT							





QEP Energy Company

## Daily Activity and Cost Summary

Well Name: JB 4G-26-7-21

API 43-047-52468		Surface Legal Location Sec 26 T7S R20E		Field Name UNDESIGNATED		State Utah		Well Configuration Type Horizontal			
Ground Elevation (ft) 4,975.5		Casing Flange Elevation (ft) 4,975.50		Current KB to GL (ft) 16.00		Current KB to CF (ft) 16.00		Spud Date 10/10/2012 14:00		Final Rig Release 11/17/2012 00:00	
DOL		Start Date		Summary							
29.0		11/13/2012		DIRECTIONAL DRILLING RIG SERVICE SURVEYS & CONNECTIONS, CIRC. SAMPLES							
30.0		11/14/2012		DIRECTIONAL DRILL 14 HR, SURVEY 0.5 HR, CIRCULATE 2 HR, RIG SERVICE 0.5 HR, WIPER TRIP 7 HR							
31.0		11/15/2012		CIRCULATE 1 HR, TRIP 8 HR, OTHER 0.5 HR, MISC 0.5 HR, CSG 6 HR, RIG SER 0.5 HR, FISH 2.5 HR							
32.0		11/16/2012		LDDP 9.5 HR, R/D LAY DOWN TRUCK 0.5 HR, PJSM & SET RCIBP 2 HR, N/D BOP 6 HR, RIG DOWN 6 HR							

# Definitive Surveys

<b>Co:</b> Native Navigation		<b>Units:</b> Feet, °, %/100ft		<b>VS Az:</b> 165.96		<b>Method:</b> Minimum Curvature						
<b>Drillers:</b> Wardell / Darnell		<b>Elevation:</b> 4991.50		<b>Map System:</b> St Plane, NAD83								
<b>Well Name:</b> JB 4G26-7-21		<b>Northing:</b> 7243034.39		<b>Latitude:</b> 40.187381								
<b>Location:</b> Unith County		<b>Easting:</b> 2190511.43		<b>Longitude:</b> -109.530806								
<b>QEP Energy: JB 4G26-7-21 Surveys</b>												
No	MD	CL	Inc.	Azi.	TVD	VS	+N/S-	+E/W-	BR	WR	DLS	Comments
1	0.00	0.00	0.00		0.00	0.00	0.00	0.00				Surface
2	534.00	534.00	0.10	9.30	534.00	-0.43	0.46	0.08	0.02	1.74	0.02	Native Navigation
3	564.00	30.00	0.20	94.00	564.00	-0.44	0.48	0.13	0.33	282.33	0.72	Native Navigation
4	595.00	31.00	0.30	77.90	595.00	-0.42	0.50	0.27	0.32	-51.94	0.39	Native Navigation
5	628.00	33.00	0.04	58.60	628.00	-0.42	0.52	0.36	-0.79	-58.49	0.80	Native Navigation
6	720.00	92.00	0.30	48.20	720.00	-0.54	0.70	0.57	0.28	-11.30	0.28	Native Navigation
7	751.00	31.00	0.20	61.70	751.00	-0.59	0.78	0.67	-0.32	43.55	0.37	Native Navigation
8	782.00	31.00	0.20	61.70	782.00	-0.62	0.83	0.77	0.00	0.00	0.00	Native Navigation
9	812.00	30.00	0.20	22.40	812.00	-0.67	0.90	0.84	0.00	-131.00	0.45	Native Navigation
10	843.00	31.00	0.04	27.40	843.00	-0.72	0.96	0.86	-0.52	16.13	0.52	Native Navigation
11	905.00	62.00	0.10	196.90	905.00	-0.69	0.93	0.86	0.10	273.39	0.23	Native Navigation
12	966.00	61.00	0.20	194.80	966.00	-0.55	0.77	0.81	0.16	-3.44	0.16	Native Navigation
13	1092.00	126.00	0.10	218.30	1092.00	-0.29	0.48	0.69	-0.08	18.65	0.09	Native Navigation
14	1156.00	64.00	0.30	209.00	1156.00	-0.14	0.29	0.57	0.31	-14.53	0.32	Native Navigation
15	1251.00	95.00	0.60	208.80	1250.99	0.41	-0.37	0.21	-0.32	-0.21	0.32	Native Navigation
16	1314.00	63.00	0.80	207.40	1313.99	0.98	-1.05	-0.15	0.32	-2.22	0.32	Native Navigation
17	1377.00	63.00	1.00	200.30	1376.98	1.76	-1.95	-0.54	0.32	-11.27	0.36	Native Navigation
18	1441.00	64.00	0.90	172.30	1440.97	2.72	-2.98	-0.67	-0.16	-43.75	0.73	Native Navigation
19	1504.00	63.00	1.00	184.60	1503.96	3.74	-4.01	-0.65	0.16	19.52	0.36	Native Navigation
20	1567.00	63.00	1.20	183.80	1566.95	4.89	-5.22	-0.73	0.32	-1.27	0.32	Native Navigation
21	1679.00	112.00	1.10	192.30	1678.93	6.97	-7.44	-1.04	-0.09	7.59	0.18	Native Navigation
22	1694.00	15.00	1.40	193.00	1693.93	7.26	-7.76	-1.11	2.00	4.67	2.00	Native Navigation
23	1758.00	64.00	1.30	189.20	1757.91	8.62	-9.24	-1.40	-0.16	-5.94	0.21	Native Navigation
24	1821.00	63.00	1.50	186.30	1820.89	10.05	-10.76	-1.61	0.32	-4.60	0.34	Native Navigation
25	1884.00	63.00	1.60	191.10	1883.87	11.62	-12.45	-1.87	0.16	7.62	0.26	Native Navigation
26	1948.00	64.00	1.70	186.80	1947.84	13.32	-14.27	-2.15	0.16	-6.72	0.25	Native Navigation
27	2011.00	63.00	1.90	186.50	2010.81	15.17	-16.23	-2.38	0.32	-0.48	0.32	Native Navigation
28	2074.00	63.00	2.00	184.30	2073.77	17.19	-18.37	-2.58	0.16	-3.49	0.20	Native Navigation
29	2137.00	63.00	2.00	186.10	2136.73	19.27	-20.55	-2.78	0.00	2.86	0.10	Native Navigation
30	2201.00	64.00	2.20	189.90	2200.69	21.44	-22.88	-3.11	0.31	5.94	0.38	Native Navigation
31	2264.00	63.00	2.40	188.70	2263.64	23.76	-25.37	-3.52	0.32	-1.90	0.33	Native Navigation
32	2327.00	63.00	2.60	190.50	2326.58	26.28	-28.08	-3.98	0.32	2.86	0.34	Native Navigation
33	2390.00	63.00	2.70	193.60	2389.51	28.89	-30.93	-4.59	0.16	4.92	0.28	Native Navigation
34	2453.00	63.00	2.70	190.20	2452.44	31.56	-33.83	-5.20	0.00	-5.40	0.25	Native Navigation
35	2517.00	64.00	2.70	187.90	2516.37	34.33	-36.81	-5.67	0.00	-3.59	0.17	Native Navigation

# Definitive Surveys

36	2580.00	63.00	2.70	190.10	2579.30	37.06	-39.74	-6.14	0.00	3.49	0.16	Native Navigation
37	2644.00	64.00	2.60	191.00	2643.23	39.75	-42.65	-6.68	-0.16	1.41	0.17	Native Navigation
38	2707.00	63.00	2.50	194.20	2706.17	42.26	-45.38	-7.29	-0.16	5.08	0.28	Native Navigation
39	2770.00	63.00	2.50	194.30	2769.11	44.68	-48.04	-7.97	0.00	0.16	0.01	Native Navigation
40	2834.00	64.00	2.50	192.00	2833.05	47.16	-50.76	-8.60	0.00	-3.59	0.16	Native Navigation
41	2897.00	63.00	2.60	193.90	2895.99	49.66	-53.49	-9.23	0.16	3.02	0.21	Native Navigation
42	2960.00	63.00	2.50	192.20	2958.93	52.15	-56.22	-9.86	-0.16	-2.70	0.20	Native Navigation
43	3024.00	64.00	2.70	193.80	3022.86	54.74	-59.05	-10.52	0.31	2.50	0.33	Native Navigation
44	3087.00	63.00	2.50	191.90	3085.80	57.28	-61.84	-11.16	-0.32	-3.02	0.35	Native Navigation
45	3150.00	63.00	2.30	192.80	3148.74	59.65	-64.41	-11.72	-0.32	1.43	0.32	Native Navigation
46	3214.00	64.00	2.20	193.30	3212.69	61.88	-66.86	-12.29	-0.16	0.78	0.16	Native Navigation
47	3277.00	63.00	2.00	191.10	3275.65	63.95	-69.12	-12.78	-0.32	-3.49	0.34	Native Navigation
48	3299.37	22.37	2.03	190.81	3298.00	64.67	-69.89	-12.93	0.16	-1.29	0.16	Green River fm
49	3341.00	41.63	2.10	190.30	3339.61	66.03	-71.37	-13.20	0.16	-1.23	0.16	Native Navigation
50	3404.00	63.00	2.30	196.70	3402.56	68.17	-73.71	-13.77	0.32	10.16	0.50	Native Navigation
51	3467.00	63.00	2.40	194.50	3465.51	70.42	-76.20	-14.46	0.16	-3.49	0.21	Native Navigation
52	3531.00	64.00	2.50	204.70	3529.45	72.68	-78.77	-15.38	0.16	15.94	0.70	Native Navigation
53	3657.00	126.00	3.10	208.30	3655.30	77.34	-84.26	-18.15	0.48	2.86	0.50	Native Navigation
54	3721.00	64.00	2.90	198.70	3719.21	79.99	-87.32	-19.49	-0.31	-15.00	0.84	Native Navigation
55	3784.00	63.00	2.60	194.00	3782.14	82.59	-90.22	-20.34	-0.48	-7.46	0.60	Native Navigation
56	3847.00	63.00	2.40	192.00	3845.08	85.03	-92.89	-20.96	-0.32	-3.17	0.35	Native Navigation
57	3911.00	64.00	2.20	189.30	3909.03	87.37	-95.42	-21.44	-0.31	-4.22	0.36	Native Navigation
58	3974.00	63.00	2.20	179.40	3971.98	89.65	-97.82	-21.62	0.00	-15.71	0.60	Native Navigation
59	4010.00	36.00	2.20	174.10	4007.95	91.01	-99.20	-21.54	0.00	-14.72	0.56	Native Navigation
60	4101.00	91.00	2.20	171.20	4098.89	94.48	-102.66	-21.10	0.00	-3.19	0.12	Native Navigation
61	4164.00	63.00	2.20	168.10	4161.84	96.89	-105.04	-20.66	0.00	-4.92	0.19	Native Navigation
62	4227.00	63.00	2.40	164.50	4224.79	99.42	-107.49	-20.06	0.32	-5.71	0.39	Native Navigation
63	4291.00	64.00	2.20	161.80	4288.74	101.98	-109.95	-19.32	-0.31	-4.22	0.36	Native Navigation
64	4354.00	63.00	2.20	155.10	4351.69	104.37	-112.20	-18.43	0.00	-10.64	0.41	Native Navigation
65	4417.00	63.00	2.10	157.80	4414.65	106.71	-114.36	-17.49	-0.16	4.29	0.23	Native Navigation
66	4481.00	64.00	2.40	159.00	4478.60	109.20	-116.70	-16.56	0.47	1.87	0.47	Native Navigation
67	4544.00	63.00	2.40	155.80	4541.54	111.80	-119.14	-15.55	0.00	-5.08	0.21	Native Navigation
68	4638.00	94.00	2.50	155.70	4635.46	115.76	-122.80	-13.90	0.11	-0.11	0.11	Native Navigation
69	4701.00	63.00	2.30	153.00	4698.40	118.34	-125.18	-12.76	-0.32	-4.29	0.36	Native Navigation
70	4765.00	64.00	2.50	149.70	4762.35	120.93	-127.53	-11.47	0.31	-5.16	0.38	Native Navigation
71	4892.00	127.00	2.70	151.80	4889.22	126.49	-132.55	-8.66	0.16	1.65	0.17	Native Navigation
72	4955.00	63.00	2.70	151.60	4952.15	129.37	-135.17	-7.25	0.00	-0.32	0.01	Native Navigation
73	5019.00	64.00	2.50	149.90	5016.08	132.17	-137.70	-5.84	-0.31	-2.66	0.34	Native Navigation
74	5082.00	63.00	2.60	154.80	5079.02	134.89	-140.18	-4.54	0.16	7.78	0.38	Native Navigation
75	5146.00	64.00	2.70	153.50	5142.95	137.79	-142.85	-3.25	0.16	-2.03	0.18	Native Navigation
76	5209.00	63.00	2.60	154.30	5205.88	140.64	-145.46	-1.97	-0.16	1.27	0.17	Native Navigation

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77	5273.00	64.00	2.80	154.30	5269.81	143.59	-148.18	-0.66	0.31	0.00	0.31	Native Navigation
78	5336.00	63.00	2.60	153.90	5332.74	146.50	-150.85	0.64	-0.32	-0.64	0.32	Native Navigation
79	5400.00	64.00	2.60	158.30	5396.67	149.35	-153.50	1.81	0.00	6.87	0.31	Native Navigation
80	5463.00	63.00	2.90	158.90	5459.60	152.35	-156.31	2.91	0.48	0.95	0.48	Native Navigation
81	5520.00	57.00	2.62	150.70	5516.54	155.04	-158.80	4.07	-0.49	-14.39	0.85	Gyro surveys
82	5550.00	30.00	2.64	151.91	5546.50	156.37	-160.00	4.73	0.07	4.03	0.20	Native Navigation
83	5580.00	30.00	2.58	151.28	5576.47	157.69	-161.21	5.38	-0.20	-2.10	0.22	Native Navigation
84	5610.00	30.00	2.44	153.04	5606.44	158.97	-162.37	5.99	-0.47	5.87	0.53	Native Navigation
85	5640.00	30.00	2.51	152.03	5636.42	160.23	-163.52	6.59	0.23	-3.37	0.27	Native Navigation
86	5670.00	30.00	2.56	152.38	5666.39	161.52	-164.69	7.21	0.17	1.17	0.17	Native Navigation
87	5700.00	30.00	2.33	151.46	5696.36	162.76	-165.82	7.81	-0.77	-3.07	0.78	Native Navigation
88	5730.00	30.00	2.33	149.55	5726.33	163.94	-166.88	8.41	0.00	-6.37	0.26	Native Navigation
89	5760.00	30.00	2.55	149.74	5756.31	165.16	-167.98	9.06	0.73	0.63	0.73	Native Navigation
90	5790.00	30.00	2.41	146.87	5786.28	166.40	-169.09	9.74	-0.47	-9.57	0.62	Native Navigation
91	5820.00	30.00	2.36	147.83	5816.25	167.58	-170.14	10.41	-0.17	3.20	0.21	Native Navigation
92	5850.00	30.00	2.30	149.15	5846.23	168.75	-171.18	11.05	-0.20	4.40	0.27	Native Navigation
93	5880.00	30.00	2.54	147.88	5876.20	169.95	-172.26	11.71	0.80	-4.23	0.82	Native Navigation
94	5910.00	30.00	2.38	151.15	5906.17	171.19	-173.37	12.37	-0.53	10.90	0.71	end of gyro surveys
95	5962.00	52.00	2.50	156.00	5958.13	173.35	-175.35	13.35	0.23	9.33	0.46	Native Mud Pulse
96	5994.00	32.00	2.30	156.60	5990.10	174.67	-176.58	13.89	-0.63	1.87	0.63	Native Mud Pulse
97	6026.00	32.00	2.10	151.70	6022.08	175.87	-177.68	14.42	-0.63	-15.31	0.86	Native Mud Pulse
98	6057.00	31.00	4.30	163.30	6053.03	177.58	-179.29	15.02	7.10	37.42	7.36	Native Mud Pulse
99	6089.00	32.00	7.20	167.00	6084.86	180.79	-182.40	15.82	9.06	11.56	9.13	Native Mud Pulse
100	6120.00	31.00	10.50	165.50	6115.49	185.56	-187.03	16.97	10.64	-4.84	10.67	Native Mud Pulse
101	6152.00	32.00	13.50	165.10	6146.79	192.21	-193.46	18.66	9.37	-1.25	9.38	Native Mud Pulse
102	6184.00	32.00	16.40	166.60	6177.70	200.46	-201.47	20.66	9.06	4.69	9.14	Native Mud Pulse
103	6216.00	32.00	19.50	168.00	6208.14	210.32	-211.09	22.82	9.69	4.37	9.78	Native Mud Pulse
104	6248.00	32.00	23.10	169.00	6237.95	221.93	-222.48	25.13	11.25	3.12	11.31	Native Mud Pulse
105	6280.00	32.00	27.40	168.90	6266.88	235.56	-235.87	27.75	13.44	-0.31	13.44	Native Mud Pulse
106	6311.00	31.00	31.90	169.30	6293.82	250.87	-250.93	30.64	14.52	1.29	14.53	Native Mud Pulse
107	6343.00	32.00	35.70	170.10	6320.40	268.62	-268.44	33.82	11.87	2.50	11.96	Native Mud Pulse
108	6374.00	31.00	39.50	169.20	6344.96	287.50	-287.04	37.22	12.26	-2.90	12.38	Native Mud Pulse
109	6406.00	32.00	44.30	169.80	6368.77	308.82	-308.05	41.11	15.00	1.87	15.05	Native Mud Pulse
110	6438.00	32.00	48.30	169.80	6390.88	331.90	-330.81	45.21	12.50	0.00	12.50	Native Mud Pulse
111	6470.00	32.00	52.60	168.00	6411.25	356.53	-355.02	49.97	13.44	-5.63	14.12	Native Mud Pulse
112	6501.00	31.00	57.30	167.20	6429.05	381.89	-379.79	55.42	15.16	-2.58	15.31	Native Mud Pulse
113	6533.00	32.00	61.70	166.90	6445.28	409.45	-406.66	61.60	13.75	-0.94	13.77	Native Mud Pulse
114	6548.00	15.00	63.70	167.70	6452.16	422.78	-419.66	64.53	13.33	5.33	14.15	BHA change
115	6580.00	32.00	66.30	167.00	6465.69	451.77	-447.96	70.88	8.12	-2.19	8.36	Native Mud Pulse
116	6611.00	31.00	70.30	166.20	6477.14	480.56	-475.97	77.56	12.90	-2.58	13.12	Native Mud Pulse
117	6643.00	32.00	73.90	164.40	6486.98	511.01	-505.41	85.29	11.25	-5.63	12.46	Native Mud Pulse



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118	6675.00	32.00	73.80	163.80	6495.88	541.73	-534.98	93.71	-0.31	-1.88	1.83	Native Mud Pulse
119	6707.00	32.00	73.10	163.30	6505.00	572.37	-564.39	102.39	-2.19	-1.56	2.65	Native Mud Pulse
120	6739.00	32.00	76.40	163.80	6513.41	603.22	-594.00	111.14	10.31	1.56	10.42	Native Mud Pulse
121	6770.00	31.00	81.00	166.40	6519.49	633.60	-623.37	118.94	14.84	8.39	16.96	Native Mud Pulse
122	6802.00	32.00	81.40	166.20	6524.38	665.22	-654.09	126.43	1.25	-0.63	1.39	Native Mud Pulse
123	6834.00	32.00	84.00	165.60	6528.45	696.96	-684.87	134.17	8.12	-1.88	8.33	Native Mud Pulse
124	6866.00	32.00	87.90	165.60	6530.71	728.87	-715.78	142.10	12.19	0.00	12.19	Native Mud Pulse
125	6897.00	31.00	88.30	165.30	6531.73	759.86	-745.77	149.89	1.29	-0.97	1.61	Native Mud Pulse
126	6929.00	32.00	88.10	165.50	6532.74	791.84	-776.72	157.95	-0.63	0.62	0.88	Native Mud Pulse
127	6960.00	31.00	92.00	165.30	6532.71	822.83	-806.72	165.76	12.58	-0.65	12.60	Native Mud Pulse
128	6993.00	33.00	94.10	165.50	6530.96	855.78	-838.60	174.07	6.36	0.61	6.39	Native Mud Pulse
129	7025.00	32.00	92.70	164.10	6529.06	887.72	-869.43	182.44	-4.38	-4.38	6.18	Native Mud Pulse
130	7056.00	31.00	89.90	163.00	6528.35	918.68	-899.15	191.22	-9.03	-3.55	9.70	Native Mud Pulse
131	7088.00	32.00	90.10	163.50	6528.35	950.64	-929.79	200.44	0.62	1.56	1.68	Native Mud Pulse
132	7120.00	32.00	93.80	164.10	6527.27	982.59	-960.50	209.36	11.56	1.87	11.71	Native Mud Pulse
133	7151.00	31.00	94.40	164.20	6525.05	1013.50	-990.24	217.81	1.94	0.32	1.96	Native Mud Pulse
134	7183.00	32.00	92.20	163.70	6523.21	1045.42	-1020.94	226.64	-6.88	-1.56	7.05	Native Mud Pulse
135	7215.00	32.00	91.80	163.10	6522.09	1077.37	-1051.59	235.77	-1.25	-1.88	2.25	Native Mud Pulse
136	7247.00	32.00	93.20	163.50	6520.70	1109.31	-1082.21	244.96	4.37	1.25	4.55	Native Mud Pulse
137	7278.00	31.00	95.40	164.30	6518.37	1140.20	-1111.91	253.53	7.10	2.58	7.55	Native Mud Pulse
138	7310.00	32.00	96.00	163.80	6515.19	1172.02	-1142.52	262.28	1.87	-1.56	2.44	Native Mud Pulse
139	7341.00	31.00	91.60	162.40	6513.14	1202.91	-1172.11	271.27	-14.19	-4.52	14.89	Native Mud Pulse
140	7373.00	32.00	90.20	162.70	6512.64	1234.85	-1202.63	280.87	-4.38	0.94	4.47	Native Mud Pulse
141	7405.00	32.00	91.40	163.70	6512.19	1266.80	-1233.26	290.12	3.75	3.12	4.88	Native Mud Pulse
142	7437.00	32.00	92.20	163.40	6511.18	1298.76	-1263.94	299.17	2.50	-0.94	2.67	Native Mud Pulse
143	7468.00	31.00	91.70	163.60	6510.13	1329.71	-1293.64	307.97	-1.61	0.64	1.74	Native Mud Pulse
144	7500.00	32.00	90.70	164.20	6509.46	1361.68	-1324.38	316.84	-3.13	1.87	3.64	Native Mud Pulse
145	7532.00	32.00	91.20	164.20	6508.93	1393.67	-1355.17	325.56	1.56	0.00	1.56	Native Mud Pulse
146	7563.00	31.00	92.40	164.60	6507.95	1424.64	-1385.01	333.89	3.87	1.29	4.08	Native Mud Pulse
147	7594.00	31.00	92.40	164.80	6506.66	1455.60	-1414.89	342.06	0.00	0.64	0.64	Native Mud Pulse
148	7626.00	32.00	93.00	164.80	6505.15	1487.56	-1445.73	350.44	1.87	0.00	1.87	Native Mud Pulse
149	7658.00	32.00	93.50	165.10	6503.33	1519.50	-1476.59	358.74	1.56	0.94	1.82	Native Mud Pulse
150	7690.00	32.00	93.10	164.90	6501.49	1551.45	-1507.44	367.01	-1.25	-0.63	1.40	Native Mud Pulse
151	7721.00	31.00	92.50	164.80	6499.98	1582.40	-1537.33	375.10	-1.94	-0.32	1.96	Native Mud Pulse
152	7753.00	32.00	92.00	164.30	6498.72	1614.37	-1568.15	383.62	-1.56	-1.56	2.21	Native Mud Pulse
153	7784.00	31.00	92.30	164.50	6497.56	1645.34	-1597.99	391.95	0.97	0.64	1.16	Native Mud Pulse
154	7816.00	32.00	92.40	164.50	6496.25	1677.30	-1628.80	400.49	0.31	0.00	0.31	Native Mud Pulse
155	7848.00	32.00	92.00	164.70	6495.02	1709.27	-1659.63	408.98	-1.25	0.62	1.40	Native Mud Pulse
156	7879.00	31.00	92.60	165.20	6493.77	1740.24	-1689.54	417.03	1.94	1.61	2.52	Native Mud Pulse
157	7910.00	31.00	93.80	165.80	6492.04	1771.19	-1719.50	424.77	3.87	1.94	4.33	Native Mud Pulse
158	7942.00	32.00	93.60	165.50	6489.98	1803.12	-1750.44	432.69	-0.63	-0.94	1.13	Native Mud Pulse

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159	7973.00	31.00	92.60	164.90	6488.30	1834.07	-1780.37	440.60	-3.23	-1.94	3.76	Native Mud Pulse
160	8005.00	32.00	92.10	164.90	6486.99	1866.04	-1811.24	448.93	-1.56	0.00	1.56	Native Mud Pulse
161	8037.00	32.00	91.70	164.70	6485.93	1898.01	-1842.10	457.31	-1.25	-0.63	1.40	Native Mud Pulse
162	8069.00	32.00	91.20	164.00	6485.12	1929.99	-1872.90	465.94	-1.56	-2.19	2.69	Native Mud Pulse
163	8100.00	31.00	92.60	165.30	6484.09	1960.96	-1902.78	474.14	4.52	4.19	6.16	Native Mud Pulse
164	8132.00	32.00	95.40	166.10	6481.86	1992.88	-1933.71	482.03	8.75	2.50	9.10	Native Mud Pulse
165	8163.00	31.00	95.10	165.50	6479.02	2023.75	-1963.64	489.60	-0.97	-1.94	2.16	Native Mud Pulse
166	8195.00	32.00	93.50	164.90	6476.62	2055.66	-1994.49	497.75	-5.00	-1.88	5.34	Native Mud Pulse
167	8226.00	31.00	94.10	165.50	6474.57	2086.59	-2024.39	505.65	1.94	1.94	2.73	Native Mud Pulse
168	8258.00	32.00	94.90	165.40	6472.06	2118.49	-2055.27	513.67	2.50	-0.31	2.52	Native Mud Pulse
169	8290.00	32.00	95.00	165.00	6469.30	2150.36	-2086.09	521.81	0.31	-1.25	1.28	Native Mud Pulse
170	8321.00	31.00	95.00	164.90	6466.60	2181.24	-2115.91	529.83	0.00	-0.32	0.32	Native Mud Pulse
171	8353.00	32.00	93.10	163.30	6464.33	2213.14	-2146.61	538.57	-5.94	-5.00	7.75	Native Mud Pulse
172	8386.00	33.00	91.00	163.60	6463.15	2246.09	-2178.22	547.97	-6.36	0.91	6.43	Native Mud Pulse
173	8417.00	31.00	91.50	163.80	6462.48	2277.06	-2207.97	556.66	1.61	0.64	1.74	Native Mud Pulse
174	8448.00	31.00	91.70	164.00	6461.61	2308.02	-2237.74	565.26	0.64	0.64	0.91	Native Mud Pulse
175	8480.00	32.00	92.10	163.80	6460.55	2339.98	-2268.47	574.13	1.25	-0.63	1.40	Native Mud Pulse
176	8512.00	32.00	92.40	163.70	6459.30	2371.94	-2299.17	583.07	0.94	-0.31	0.99	Native Mud Pulse
177	8543.00	31.00	93.80	164.60	6457.62	2402.87	-2328.94	591.53	4.52	2.90	5.37	Native Mud Pulse
178	8575.00	32.00	94.60	164.50	6455.28	2434.78	-2359.70	600.03	2.50	-0.31	2.52	Native Mud Pulse
179	8606.00	31.00	94.90	164.20	6452.71	2465.66	-2389.45	608.36	0.97	-0.97	1.37	Native Mud Pulse
180	8638.00	32.00	93.90	164.20	6450.25	2497.55	-2420.15	617.05	-3.13	0.00	3.13	Native Mud Pulse
181	8670.00	32.00	94.60	164.80	6447.88	2529.45	-2450.90	625.58	2.19	1.87	2.88	Native Mud Pulse
182	8701.00	31.00	93.90	164.30	6445.58	2560.36	-2480.70	633.82	-2.26	-1.61	2.77	Native Mud Pulse
183	8733.00	32.00	90.50	163.60	6444.36	2592.31	-2511.43	642.65	-10.63	-2.19	10.85	Native Mud Pulse
184	8764.00	31.00	89.60	164.30	6444.33	2623.29	-2541.22	651.23	-2.90	2.26	3.68	Native Mud Pulse
185	8796.00	32.00	90.30	164.00	6444.36	2655.27	-2572.00	659.97	2.19	-0.94	2.38	Native Mud Pulse
186	8812.00	16.00	91.20	163.10	6444.15	2671.26	-2587.34	664.50	5.62	-5.63	7.95	BHA change
187	8844.00	32.00	91.60	163.20	6443.37	2703.21	-2617.96	673.77	1.25	0.31	1.29	Native Mud Pulse
188	8876.00	32.00	92.00	163.10	6442.36	2735.15	-2648.57	683.04	1.25	-0.31	1.29	Native Mud Pulse
189	8908.00	32.00	93.50	163.40	6440.83	2767.08	-2679.18	692.25	4.69	0.94	4.78	Native Mud Pulse
190	8940.00	32.00	93.80	163.40	6438.79	2798.98	-2709.78	701.37	0.94	0.00	0.94	Native Mud Pulse
191	8971.00	31.00	93.50	164.40	6436.81	2829.90	-2739.50	709.95	-0.97	3.23	3.36	Native Mud Pulse
192	9003.00	32.00	93.70	164.00	6434.80	2861.82	-2770.23	718.65	0.62	-1.25	1.40	Native Mud Pulse
193	9035.00	32.00	91.40	164.10	6433.38	2893.77	-2800.97	727.43	-7.19	0.31	7.19	Native Mud Pulse
194	9068.00	33.00	91.70	164.20	6432.49	2926.74	-2832.70	736.44	0.91	0.30	0.96	Native Mud Pulse
195	9100.00	32.00	91.50	164.20	6431.60	2958.71	-2863.48	745.15	-0.63	0.00	0.63	Native Mud Pulse
196	9132.00	32.00	91.80	164.20	6430.67	2990.69	-2894.26	753.86	0.94	0.00	0.94	Native Mud Pulse
197	9163.00	31.00	91.70	164.00	6429.73	3021.66	-2924.06	762.35	-0.32	-0.65	0.72	Native Mud Pulse
198	9195.00	32.00	91.60	163.30	6428.81	3053.62	-2954.75	771.36	-0.31	-2.19	2.21	Native Mud Pulse
199	9226.00	31.00	93.50	164.60	6427.43	3084.56	-2984.51	779.92	6.13	4.19	7.42	Native Mud Pulse

# Definitive Surveys

200	9258.00	32.00	94.70	166.20	6425.14	3116.48	-3015.40	787.96	3.75	5.00	6.24	Native Mud Pulse
201	9290.00	32.00	95.20	165.80	6422.38	3148.36	-3046.33	795.68	1.56	-1.25	2.00	Native Mud Pulse
202	9321.00	31.00	95.10	165.70	6419.59	3179.23	-3076.26	803.27	-0.32	-0.32	0.46	Native Mud Pulse
203	9353.00	32.00	94.10	166.10	6417.03	3211.13	-3107.19	811.05	-3.13	1.25	3.36	Native Mud Pulse
204	9385.00	32.00	93.90	165.50	6414.80	3243.05	-3138.14	818.88	-0.63	-1.88	1.97	Native Mud Pulse
205	9417.00	32.00	93.00	165.80	6412.87	3274.99	-3169.09	826.79	-2.81	0.94	2.96	Native Mud Pulse
206	9449.00	32.00	92.90	165.30	6411.22	3306.95	-3200.03	834.77	-0.31	-1.56	1.59	Native Mud Pulse
207	9481.00	32.00	93.70	166.20	6409.38	3338.90	-3231.00	842.63	2.50	2.81	3.76	Native Mud Pulse
208	9513.00	32.00	94.20	166.20	6407.18	3370.82	-3262.00	850.25	1.56	0.00	1.56	Native Mud Pulse
209	9544.00	31.00	94.20	166.10	6404.91	3401.74	-3292.02	857.65	0.00	-0.32	0.32	Native Mud Pulse
210	9576.00	32.00	94.00	166.00	6402.62	3433.65	-3322.99	865.34	-0.63	-0.31	0.70	Native Mud Pulse
211	9608.00	32.00	95.00	166.20	6400.11	3465.55	-3353.96	873.00	3.12	0.62	3.19	Native Mud Pulse
212	9640.00	32.00	91.60	166.10	6398.27	3497.50	-3384.97	880.65	-10.63	-0.31	10.63	Native Mud Pulse
213	9672.00	32.00	89.70	165.60	6397.90	3529.49	-3416.00	888.47	-5.94	-1.56	6.14	Native Mud Pulse
214	9704.00	32.00	90.30	165.50	6397.90	3561.49	-3446.99	896.46	1.87	-0.31	1.90	Native Mud Pulse
215	9736.00	32.00	90.50	165.50	6397.68	3593.49	-3477.97	904.47	0.62	0.00	0.62	Native Mud Pulse
216	9767.00	31.00	89.50	164.60	6397.68	3624.49	-3507.92	912.47	-3.23	-2.90	4.34	Native Mud Pulse
217	9799.00	32.00	89.70	164.80	6397.90	3656.48	-3538.78	920.91	0.62	0.62	0.88	Native Mud Pulse
218	9831.00	32.00	89.90	164.30	6398.01	3688.47	-3569.62	929.44	0.62	-1.56	1.68	Native Mud Pulse
219	9863.00	32.00	91.10	164.80	6397.74	3720.46	-3600.47	937.96	3.75	1.56	4.06	Native Mud Pulse
220	9894.00	31.00	91.90	165.50	6396.92	3751.44	-3630.42	945.90	2.58	2.26	3.43	Native Mud Pulse
221	9926.00	32.00	92.30	166.10	6395.75	3783.42	-3661.42	953.75	1.25	1.87	2.25	Native Mud Pulse
222	9957.00	31.00	92.90	165.90	6394.34	3814.39	-3691.47	961.24	1.94	-0.65	2.04	Native Mud Pulse
223	9989.00	32.00	93.50	166.90	6392.56	3846.34	-3722.52	968.75	1.87	3.12	3.64	Native Mud Pulse
224	10020.00	31.00	92.80	166.80	6390.85	3877.29	-3752.66	975.79	-2.26	-0.32	2.28	Native Mud Pulse
225	10052.00	32.00	93.10	166.40	6389.21	3909.24	-3783.75	983.20	0.94	-1.25	1.56	Native Mud Pulse
226	10085.00	33.00	93.80	166.80	6387.22	3942.18	-3815.79	990.83	2.12	1.21	2.44	Native Mud Pulse
227	10117.00	32.00	94.00	167.10	6385.05	3974.10	-3846.90	998.04	0.62	0.94	1.12	Native Mud Pulse
228	10148.00	31.00	95.10	167.30	6382.59	4004.99	-3877.03	1004.89	3.55	0.64	3.61	Native Mud Pulse
229	10166.00	18.00	95.40	167.50	6380.94	4022.91	-3894.52	1008.80	1.67	1.11	2.00	Survey @ TD
230	10207.00	41.00	95.40	167.50	6377.08	4063.72	-3934.37	1017.63	0.00	0.00	0.00	Straight line projection



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
440 West 200 South, Suite 500  
Salt Lake City, UT 84101  
<http://www.blm.gov/ut/st/en.html>



IN REPLY REFER TO:  
3160 – UTU86617X  
(UT922000)

**FEB 24 2014**

**RECEIVED**  
**MAR 12 2014**  
MA

DIV. OF OIL, GAS & MINING  
DIV. OF C

QEP Energy Company  
Independence Plaza  
1050 17<sup>th</sup> Street, Suite 500  
Denver, Colorado 80256

Re: Non-Paying Well Determination  
JB 4G-26-7-21 Well, Johnson Bottom Unit  
Uintah County, Utah

Gentlemen:

Pursuant to your request of February 10, 2014, it has been determined by this office that under existing conditions the following well is not capable of producing unitized substances in paying quantities as defined in Section 9 of the unit agreement:

API Number	Well Name	Surface	Location	Comp. Date	Lease
43-047-52468	JB 4G-26-7-21	NWNW	26 7.0 S 21.0 E SLB&M	11/17/2012	UTU73680

All past and future production from this well shall be handled and reported on a lease basis. If you have any questions, please contact Mickey Coulthard of this office at (801) 539-4042.

Sincerely,

*Bruce J. Hammond*

for Roger L. Bankert  
Chief, Branch of Minerals



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>																														
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU73680																														
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> JOHNSON BOTTOM																														
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>8. WELL NAME and NUMBER:</b> JB 4G-26-7-21																														
<b>3. ADDRESS OF OPERATOR:</b> 11002 East 17500 South, Vernal, Ut, 84078		<b>9. API NUMBER:</b> 43047524680000																														
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0759 FNL 0307 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWNW Section: 26 Township: 07.0S Range: 21.0E Meridian: S		<b>9. FIELD and POOL or WILDCAT:</b> BRENNAN BOTTOM																														
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH																														
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>																																
<b>TYPE OF SUBMISSION</b>  <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 4/30/2014  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<b>TYPE OF ACTION</b>  <table style="width: 100%;"> <tr> <td><input type="checkbox"/> ACIDIZE</td> <td><input type="checkbox"/> ALTER CASING</td> <td><input type="checkbox"/> CASING REPAIR</td> </tr> <tr> <td><input type="checkbox"/> CHANGE TO PREVIOUS PLANS</td> <td><input type="checkbox"/> CHANGE TUBING</td> <td><input type="checkbox"/> CHANGE WELL NAME</td> </tr> <tr> <td><input type="checkbox"/> CHANGE WELL STATUS</td> <td><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS</td> <td><input type="checkbox"/> CONVERT WELL TYPE</td> </tr> <tr> <td><input type="checkbox"/> DEEPEN</td> <td><input type="checkbox"/> FRACTURE TREAT</td> <td><input type="checkbox"/> NEW CONSTRUCTION</td> </tr> <tr> <td><input type="checkbox"/> OPERATOR CHANGE</td> <td><input type="checkbox"/> PLUG AND ABANDON</td> <td><input type="checkbox"/> PLUG BACK</td> </tr> <tr> <td><input type="checkbox"/> PRODUCTION START OR RESUME</td> <td><input type="checkbox"/> RECLAMATION OF WELL SITE</td> <td><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION</td> </tr> <tr> <td><input checked="" type="checkbox"/> REPERFORATE CURRENT FORMATION</td> <td><input type="checkbox"/> SIDETRACK TO REPAIR WELL</td> <td><input type="checkbox"/> TEMPORARY ABANDON</td> </tr> <tr> <td><input type="checkbox"/> TUBING REPAIR</td> <td><input type="checkbox"/> VENT OR FLARE</td> <td><input type="checkbox"/> WATER DISPOSAL</td> </tr> <tr> <td><input type="checkbox"/> WATER SHUTOFF</td> <td><input type="checkbox"/> SI TA STATUS EXTENSION</td> <td><input type="checkbox"/> APD EXTENSION</td> </tr> <tr> <td><input type="checkbox"/> WILDCAT WELL DETERMINATION</td> <td><input type="checkbox"/> OTHER</td> <td>OTHER: <input style="width: 100px;" type="text"/></td> </tr> </table>		<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	<input checked="" type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>
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<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>  QEP ENERGY COMPANY REQUESTS APPROVAL TO ADD ADDITIONAL PERFS IN THE GREEN RIVER FORMATION AND RECOMPLETE THE REFERENCED WELL AS FOLLOWS: 1. Cut 4 1/2" casing liner at 5930' and pull 600' of liner out of the well. 2. Set a CIBP at 5920'. Due to the depth constraints given the max depth QEP can cut the casing and set the CIBP, QEP requests a variance to the regulations requiring 50' of cement on a CIBP. QEP requests to not cap with any cement at this time to allow for some rat hole. QEP will cap the CIBP with cement prior to permanently abandoning the well. 3. Complete the well in the following manner: 4. Stage 1: 5770'-5893', 3 spf, fraced with slickwater and a x-linked proppant carrying fluid. 5. Stage 2: 5532'-5672', 3 spf, fraced with slickwater and a x-linked proppant carrying fluid. 6. Stage 3: 5370'-5431', 3 spf, fraced with slickwater and a x-linked proppant carrying fluid.																																
<b>NAME (PLEASE PRINT)</b> Benna Muth		<b>PHONE NUMBER</b> 435 781-4320																														
<b>SIGNATURE</b> N/A		<b>TITLE</b> Regulatory Assistant																														
<b>DATE</b> 4/30/2014		<b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> May 01, 2014 <b>By:</b>																														

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU73680
<b>1. TYPE OF WELL</b> Oil Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> QEP ENERGY COMPANY		<b>7. UNIT or CA AGREEMENT NAME:</b> JOHNSON BOTTOM
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<b>STATE:</b> UTAH		
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<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
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	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. QEP ENERGY COMPANY ADDED ADDITIONAL PERFORATIONS TO THE GREEN RIVER FORMATION AS FOLLOWS: SET CIBP AT 5920'; PERFORATE FROM 5,370' - 5,893', 111 SHOTS AT 3 SHOTS PER FOOT; FRAC WITH 6,110 BBLS SLICKWATER AND 260,000 LBS 20/40 SAND.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> June 10, 2014		
<b>NAME (PLEASE PRINT)</b> Benna Muth	<b>PHONE NUMBER</b> 435 781-4320	<b>TITLE</b> Regulatory Assistant
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/2/2014	